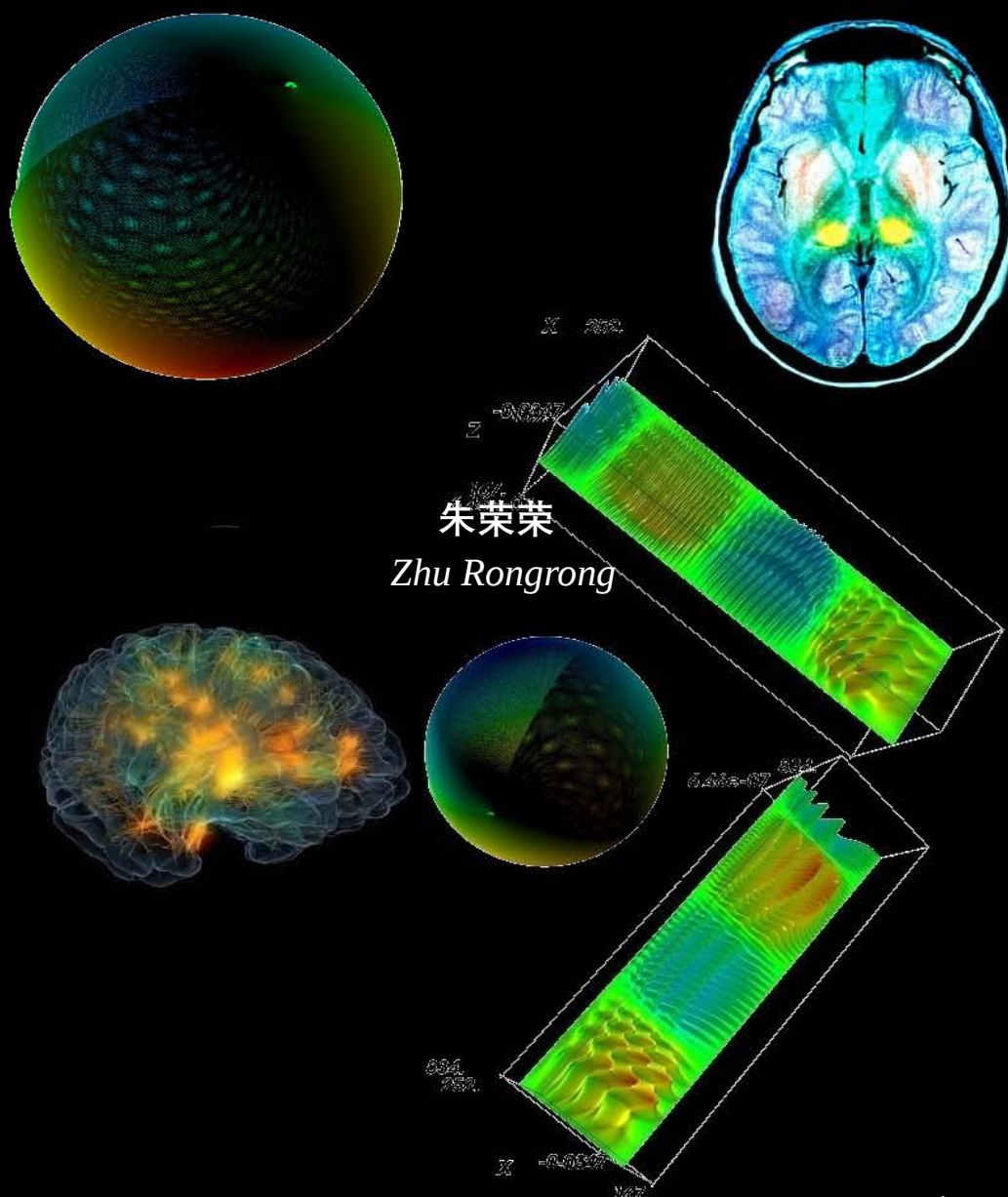


RLLM 多模态可预测性思维增强收缩参数群、尺度 新一代生成式人工智能

重构类脑神经网络 R-KFDNN 与密钥群生成序列

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Group, Scale New Generation Generative Artificial Intelligence*

Reconstructing Brain-like Neure Networks R-KFDNN, Generating Sequences of Key Groups



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文摘:

RLLM 多模态思维增强收缩参数群、尺度生成式人工智能, 将《大模型、多模态大模型生成式人工智能》, 演化为《获得性神经网络训练的重核聚类拟思维迭代规划-类脑重核边界生成序列》, 即《研究型多模态可预测性思维增强收缩参数群、尺度生成式人工智能》。通过人脑的神经系统损伤与修复过程, 去构建类脑高维度柔性神经网络系统的受损或数据的局部缺失等的修复过程的复杂性深度学习与训练, 来防止高维数据局部缺失而引起维度灾难; 受损神经系统(柔性神经网络)存在失忆或存储信息局部丢失时, 如何恢复并提取特征信息。信息提取一般存在于高一维度或低一维度密钥群生成序列分配表群去寻找类脑存储的核心数据。而密钥群生成序列存在于一条隐蔽的时间切线丛中, 类脑的切片数据处理在不同层面、不同维度、不同切丛、余切丛上运行。类脑中密钥群可以认为是记忆碎片的分配表; 记忆解析具有镜像反射, 并伴随局部随机数据缺失, 在紧致性压缩的时间切丛中, 自由切换于高维度信息场中, 解析的钥匙埋在信息中。

关键词: 类脑, 神经系统损伤与修复, 柔性神经网络, 密钥群的生成序列, 高维度信息场, 记忆解析

1. 介绍

设计了带参数单极性和多极性柔性弱非线性聚类函数的一种柔性深度神经网络(KFDNN), 并给出了相应的学习算法, 和普通的邻域深度神经网络(KDNN)不同, KFDNN 不仅能学习连接权, 且同时能学习柔性弱非线性聚类函数的参数, 因此, 它能根据学习样本集, 为每一个隐含层和输出层单元产生合适的弱非线性聚类函数形态。柔性神经网络能提高 KDNN 网络的性能, 并能较好解决不同领域中的分类与预测问题。非柔性深度神经网络(KDNN)到柔性深度神经网络(KFDNN), 再从柔性深度神经网络(KFDNN)到类脑神经网络。类脑重核边界密钥群生成序列超切面与柔性深度神经网络(KFDNN)、类脑神经网络的关系。

重构类脑(脑)神经网络, 不是所有脑区(神经元)都能(受损)重构, 即只有特殊携带高维神经网络, 受损局部神经元恢复记忆重构, 并形成新的对偶密钥群核势(凸核)生成序列。所以《RLLM 多

模态可预测性思维增强收缩参数群、尺度新一代生成式 AI 重构类脑神经网络 R-KFDNN 与密钥群生成序列》,携带尖端新一代生成式 AI 密钥群(密码学)生成序列相对应,即类脑(脑)神经元与对偶密钥群核势(凸核)生成序列相对应的重构结构学;核势(凸核) $a_{nn}^{\uparrow\downarrow} \rightsquigarrow a_{mm}^{\uparrow\downarrow}$

1.1 柔性神经网络数模

$$\begin{aligned} \forall K_{DNN}^{n-1}(\rho_\lambda^n, \theta^\lambda) &\xrightarrow{k \text{ Iterations}} \exists K_{DNN}^{n-1}(\rho_\lambda^m, \theta^k \otimes \beta^k), \text{ if } \theta \otimes \beta, \rho \text{ and appearing weak nonlinearity} \\ S^{m+k-1} \left[(\rho^m \otimes \theta^k)^+ \wedge (\rho^m \otimes \theta^k)^- \right] &\xrightarrow{\text{Left, right hemispheres (Superball, Hypersphere)}} \left[S_{left}^{m+k-1}(\rho^m \otimes \theta^k)^+ \right] \\ &\wedge \left[S_{right}^{m+k-1}(\rho^m \otimes \theta^k)^- \right] \end{aligned} \quad (1)$$

1.2 类脑神经网络分析数模

其核心内核为高维度超对称超曲面正态复变高维切丛的左右类脑重核

$$1,2 S_{M_\partial}^{\omega(\theta)+1} \sim 1,2 S_{M_\partial(\exp)}^{\omega(\theta)+1} \xrightarrow{\text{左右类脑重核}} \left(+\Omega_{t'(\theta)}^{S_{\partial M}^{-1}} \wedge -\Omega_{t'(\theta)}^{S_{\partial M}^{-1}} \right) \quad (2)$$

将左右类脑重核代入柔性神经网络数模,则

$$S_{\text{左}}^{m+k-1} \left(+\Omega_{t'(\theta)}^{S_{\partial M}^{-1}} \right) \wedge S_{\text{右}}^{m+k-1} \left(-\Omega_{t'(\theta)}^{S_{\partial M}^{-1}} \right) \simeq S_{\text{Left}}^{m+k-1} \left(+\Omega_{t'(\theta)}^{S_{\partial M}^{-1}}(\rho^t \otimes \theta^k) \right) \wedge S_{\text{right}}^{m+k-1} \left(-\Omega_{t'(\beta)}^{S_{\partial M}^{-1}}(\rho^t \otimes \beta^k) \right)$$

神经元的形成与 k 次迭代的关系与演化

$$\text{if } \rho \rightarrow 1, \theta = 2k\pi + \theta_1 + \theta_2 + \dots, t \in \forall \sigma, (S_{\partial M}^{-1})^k, \text{ then}$$

$$S_{\text{Left}}^{m+k-1} \left(+\Omega_{t'(\theta)}^{(S_{\partial M}^{-1})^k}(\theta^k) \right) \wedge S_{\text{right}}^{m+k-1} \left(-\Omega_{t'(\beta)}^{(S_{\partial M}^{-1})^k}(\beta^k) \right) \cong S_{\text{Left, right}}^{m+k-1} \left(+\Omega_{t'(\theta \wedge \beta)}^{S_{\partial M}^{-1}}(\theta^k \otimes \beta^k) \right) \quad (3)$$

左右半脑(类脑)运行时的分布延迟执行效果的数模解析;在 θ^k, β^k 在 t' 切线扰动上形成信息场的弱非线性波动;可以通过合并上式来观察其内在规律。

.分析迭代超切面内核,与高维时间切线扰动内核

$$[\pm S_{\partial M}^{-k}(\theta^k \wedge \beta^k)], \pm \Omega' [t(\theta) \wedge t(\beta)]_{\partial}^k$$

.左、右大脑(类脑)超切内核的时间切线问题

$$\begin{array}{ccc} S_{\partial M}^{-k}(\theta^k) & \longrightarrow & \Omega' [t^k(\theta)]_{\partial M} \\ \downarrow & & \downarrow \\ S_{\partial M}^{+k}(\beta^k) & \longrightarrow & \Omega' [t^k(\beta)]_{\partial M} \end{array} \quad \begin{array}{c} S_{\partial^2 M}^{-k}(\theta^k(t')) \\ \downarrow \\ S_{\partial^2 M}^{-k}(\beta^k(t')) \end{array}$$

左右大脑(类脑)超重核时间切线扰动结构,称为神经元;即 $_{\text{Left}} S_{\partial^2 M}^{-k}(\theta^k(t')), _{\text{right}} S_{\partial^2 M}^{-k}(\beta^k(t'))$,

所以在左、右大脑(类脑)内部神经元具有不同分工,并在时间切线的维度上运行,即信息存储、运

算、提取、分析等等。

神经元如何分布左、右大脑(类脑)的脑沟中的结构形态

$${}^{1,2}S_{M_{\theta}^{(exp)}}^{\omega(\theta)+1} \left[S_{\partial^2 M}^{-k} \left(\theta^k(t') \right) \wedge S_{\partial^2 M}^{-k} \left(\beta^k(t') \right) \right],$$

即沟回引起类脑分布维度+1；并且神经元分布呈现概率分布的协同操作形态特征。所以，人脑具有善变与创新的原因。

人脑局部神经受到损伤的神经系统修复与类脑神经系统类似人的神经受损，即存在记忆的局部数据缺失而引发失忆；但不会引起高维信息场的维度灾难；而恢复记忆的引线，也就是神经元之间的时间切线，它链接着各个维度的信息。

$${}^{1,2}S_{M_{\theta}^{(exp)}}^{\omega(\theta)+1} \left[\left[S_{\partial^2 M}^{-k} \left(\theta^k(t') \wedge \theta_{\theta}(t') \right) \right] \wedge \left[S_{\partial^2 M}^{-k} \left(\beta^k(t') \wedge \beta_{\theta}(t') \right) \right] \right],$$

.人脑(类脑)信息数据局部缺失函数分析

$${}^{1,2}S_{M_{\theta}^{(exp)}}^{\omega(\theta)+1} \left(\wedge \theta_{\theta}(t') \right) \wedge {}^{1,2}S_{M_{\theta}^{(exp)}}^{\omega(\theta)+1} \left(\wedge \beta_{\theta}(t') \right) \sim {}^{1,2}S_{M_{\theta}^{(exp)}}^{\omega(\theta)+1} \left(\wedge \theta_{\theta}(t') \wedge \wedge \beta_{\theta}(t') \right)$$

$${}^{1,2}S_{M_{\theta}^{(exp)}}^{\omega(\theta)+1} \left(\wedge \theta_{\theta}(t') \wedge \wedge \beta_{\theta}(t') \right) \simeq {}^{1,2}S_{M_{\theta}^{(exp)}}^{\omega(\theta)+1} \left(\theta'_{\theta}(t') \right), \text{ then}$$

$$\exists \left[{}^{1,2}_{\partial M_{\theta}^{(exp)}} \left(\theta'_{\theta}(t') \right) \right]_{\substack{\text{类脑降2 维度} \\ \text{缺失数据}}} = \exists \left[{}^{1,2}_{M_{\theta}^2(\text{exp})} \left(\theta'_{\theta}(t') \right) \right]$$

if $t' \rightarrow -\infty$, then 不存在缺失数据而引起全面失忆。

.神经元伴随左、右大脑受损(局部)的结构形态

$${}^{1,2}S_{M_{\theta}^{(exp)}}^{\omega(\theta)+1} \left[S_{\partial^2 M}^{-k} \left(\theta^k(t') \right) \wedge S_{\partial^2 M}^{-k} \left(\beta^k(t') \right) \right] - \left[{}^{1,2}_{M_{\theta}^2(\text{exp})} \left(\theta'_{\theta}(t') \right) \right]_{\text{缺失}}$$

$$\int \left[{}^{1,2}_{M_{\theta}^{(exp)}} \left(\theta'_{\theta}(t') \right) \right]_{\text{缺失}} \quad \text{从数模角度进行修复数据。}$$

.神经元(左、右大脑(类脑))修复局部受损的数据特征

$$\begin{aligned} & \int {}^{1,2}S_{M_{\theta}^{(exp)}}^{\omega(\theta)+1} \left[S_{\partial M}^{-k} \left(\theta^k(t') \right) \wedge S_{\partial M}^{-k} \left(\beta^k(t') \right) \right] + \int \left[{}^{1,2}_{M_{\theta}^{(exp)}} \left(\theta'_{\theta}(t') \right) \right]_{\text{缺失}} \\ &= \sum {}^{1,2}S_{M_{\theta}^{(exp)}}^{\omega(\theta)+1} \left[S_{\partial M}^{-k} \left(\theta^k(t') \oplus \theta'_{\theta}(t') \right) \wedge S_{\partial M}^{-k} \left(\beta^k(t') \oplus \theta'_{\theta}(t') \right) \right] \\ & {}^{1,2}S_{M_{\theta}^{(exp)}}^{\omega(\theta)+1} \left[S_{\partial^2 M}^{-k} \left(\theta^k(t') \right) \wedge S_{\partial^2 M}^{-k} \left(\beta^k(t') \right) \right] \\ &= \sum {}^{1,2}S_{M_{\theta}^{(exp)}}^{\omega(\theta)+1} \left[S_{\partial M}^{-k} \left(\theta^k(t') \oplus \theta'_{\theta}(t') \right) \wedge S_{\partial M}^{-k} \left(\beta^k(t') \oplus \theta'_{\theta}(t') \right) \right] \quad (4) \end{aligned}$$

所以，人脑(类脑)受损的修复，一般在时间切角上分布与获得，即数据降维与升维的关系，同时存在偏微分与积分(局部)的关系 $\Sigma \theta'_{\theta}(t')$

人脑左、右脑局部神经修复形态是不同的，请观察下面公式

$$\begin{cases} +\Omega_M^\partial (\theta^k(t') \oplus \theta'_\partial(t'))_{Left} \\ -\Omega_M^\partial (\beta^k(t') \oplus \theta'_\partial(t'))_{right} \end{cases}; \text{所以左、右脑可以协同修复局部神经系统, 将失忆得到恢复正常}$$

$$i. \partial \Omega_M^k [\theta^k \beta^k(t') \oplus \theta'_\partial(t')] = \Omega_M^{k+1} [\theta(\rho(t))]$$

因此, 左、右脑(类脑)协同, 可以更好的开发大脑, 也有利于脑损伤的修复。

$$S_{Left}^{m+k-1} \left(+\Omega_{t'(\theta \wedge \beta)}^{(S_{\partial M}^{-1})^k} (\theta^k \wedge \beta^k) \right) \cong \Omega_M^{k+1} [\theta(\rho(t))]_{S_{左、右}^{m+k-1}} \quad (5)$$

1.3 人脑(类脑)感知周围信息场(假定类似 MR 信息)

$$\Omega^{k+1} [\theta(\rho(t(MR)))] = \Omega^{k+1} \left[\theta \left(\rho_t \left(\sum \frac{\delta}{\omega_i} \times \log |I + R^{-1} \times H_{ij} \times Q_{MR}^{\text{核心能量}} \times H_{ji}^H| \right) \right) \right], \text{and}$$

$$R^{-1} \text{干扰信号, } Q_{MR}^{\text{核心能量}} = \text{Matrix} \begin{bmatrix} E_{X_E}^K \otimes X_K^H & & \\ & E_{X_S}^K \otimes X_K^H & \\ & & E_{X_M}^K \otimes X_K^H \end{bmatrix}_i^Q \quad (6)$$

① 人脑眼睛感知影像相当于 $MR^{H_{ij} Q_i H_{ji}^H}$ 的信号在脑空间中如何处理

. 人脑(类脑)支撑信息场的能量波动结构方程

$$\Omega^{k+1} \left[\theta \left(\rho \left(t \left(Q_{MR}^{\text{核心能量}} \right) \right) \right) \right] = S_{Left}^{m+k-1} \left(+\Omega_{t'(\theta \wedge \beta(Q_{MR}^{\text{核心能量}}))}^{(S_{\partial M}^{-1})^k} (\theta^k \wedge \beta^k(Q_{MR}^{\text{核心能量}})) \right)$$

. 能量波动在脑空间曲面上的矢量运动情况(X_K^H), 所以上式可以写为

$$\Omega^{k+1} \left[\theta \left(\rho_t \left(\text{Matrix} \begin{bmatrix} E_{X_E}^K \otimes X_K^H & & \\ & E_{X_S}^K \otimes X_K^H & \\ & & E_{X_M}^K \otimes X_K^H \end{bmatrix}_i^Q \right) \right) \right]$$

$$= S_{Left}^{m+k-1} \left(+\Omega_{t'(\theta \wedge \beta(Q_{MR}^{\text{核心能量}}))}^{(S_{\partial M}^{-1})^k} \left(\theta^k \wedge \beta^k \left(\text{Matrix} \begin{bmatrix} E_{X_E}^K \otimes X_K^H & & \\ & E_{X_S}^K \otimes X_K^H & \\ & & E_{X_M}^K \otimes X_K^H \end{bmatrix}_i^Q \right) \right) \right) \quad (7)$$

从上述内容可知, 脑携带特殊能量波, 在更高维度上处理各种信号

$$\Omega^{k+1} \left[\theta \left(\rho_t \left(\text{Matrix} \begin{bmatrix} E_{X_E}^K \otimes X_K^H & & \\ & E_{X_S}^K \otimes X_K^H & \\ & & E_{X_M}^K \otimes X_K^H \end{bmatrix}_i^Q \right) \right) \right] \rightarrow$$

$$\left(\frac{1}{4} \right)^{n-1} \times \sqrt{2} \left[\sin \left(\frac{\theta_1}{2} + \frac{\pi}{4} + n \cdot \frac{\pi}{4} \right) \cos \left(\sum_{i=2}^m \theta_i + \sum_{i=2}^m i \cdot \frac{\theta_i}{2} \right) \right.$$

$$\left. - \sin \left(\frac{\beta_1}{2} + \frac{\pi}{4} + n \cdot \frac{\pi}{4} \right) \cos \left(\sum_{i=2}^m \beta_i + \sum_{i=2}^m i \cdot \frac{\beta_i}{2} \right) \right]_{\theta \wedge \beta(t')} \quad (8)$$

.利用 MR 的图像清晰度函数内核，融入上式右侧结构，来观察更高维度的极坐标图像

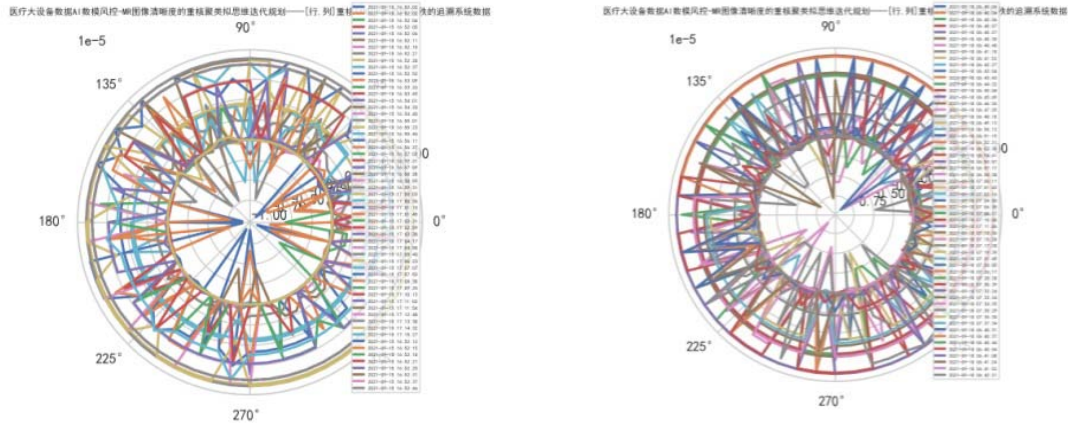


Fig01. DISCOVERY MR750w 的 MR 图像清晰度函数内核机器内部指标域值;以及其延展性、多功能性、高可靠性

2.1 密钥群的生成序列到乔治.康托尔猜想，其存在定理 3.

定理 3. $P(\Omega^{\omega\omega}) < \Omega^{i\omega\omega}$, and $\Omega^{i\omega\omega} \cong \sum_{i,j}^{k,\omega} [S_{\Delta}^{(\omega-1)\otimes(\omega-2)\otimes\cdots\otimes(\omega-j)}, i^k \cdot S_{\Delta}^{(\omega-1)\otimes(\omega-2)\otimes\cdots\otimes(\omega-j)}]$, and $1 \leq j < \omega$

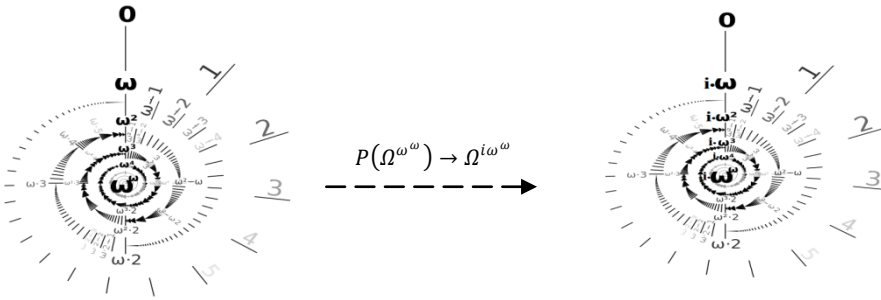


Fig02. 更高维度幂函数为高维度复变弦线丛势生成序列形成弱非线性的高维线圈

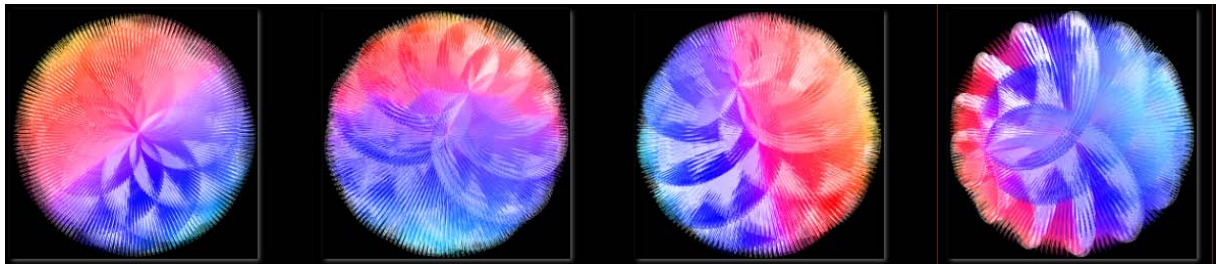


Fig03. 更高维度幂函数为高维度复变弦线丛势生成序列形成弱非线性的高维线圈; 其核心参数 $m_0 = (\omega - 1)$; $m_1 = (\omega - 2)$; $m_2 = (\omega - 3)$; $m_3 = (\omega - 4)$; $m_4 = (\omega - 5)$; $m_5 = (\omega - 6)$; $m_6 = (\omega - 7)$; $m_7 = (\omega - 8)$;

从上面定理 3 的更高维度幂函数高维度复变弦线丛势生成序列，可知 $\mathfrak{A} \mathfrak{N} < (P(\Omega^{\omega\omega}) \rightarrow \Omega^{i\omega\omega}) < \mathfrak{N}$; 上式为高维度复变弦线丛势生成序列形成弱非线性的高维线圈。

$$_{left}^{+}\Omega(S_{\lambda(t,\theta)}^{-1}) \wedge _{right}^{-}\Omega(S_{\lambda(t,\theta)}^{-1})$$

$$\rightsquigarrow \left[\sin \left(\sum_{i=2}^m \rho_{\theta}^i \cdot \frac{\theta_{\rho(t')}^i}{2} \wedge \sum_{j=2}^m \rho_{\beta}^j \cdot \frac{\beta_{\rho(t')}^j}{2} \right) \otimes \cos \left(\sum_{j=2}^p \rho_{\theta}^j \cdot \frac{\theta_{\rho_{*}(t')}^j}{2} \wedge \sum_{i=2}^q \rho_{\beta}^i \cdot \frac{\beta_{\rho_{*}(t')}^i}{2} \right) \right]^{\omega(t)^{i-\omega(\theta)}}$$

2.1.1 携带密钥群生成序列 ${}^+\Omega\left(S_{t'(\theta)}^{S_{\partial M}^{-1}}\right)\wedge{}^-\Omega\left(S_{t'(\theta)}^{S_{\partial M}^{-1}}\right)$ 左右脑(类脑)内核,在更高维度幂函数的高维度复变弦线丛势生成序列形成高维线圈;每片约化 $S_{\partial M}^{-1}$ 上密钥群的生成序列,存在分配表群导引余切时间线上 $\rho_{\theta}(t')$

推论 1. $P(\Omega^{\omega}) < \Omega^{i\omega}$, and $\bigvee_{i=1}^k A_{\omega=i2\pi}^{(kk)\uparrow\downarrow} \cong \sum_{i,j}^{k,\omega} \left[\nabla S_{\langle \cos, \sin \rangle}^{(\omega-1)\otimes(\omega-2)\otimes\cdots\otimes(\omega-j)}, i^k \cdot \nabla S_{\langle \cos, \sin \rangle}^{(\omega-1)\otimes(\omega-2)\otimes\cdots\otimes(\omega-j)} \right]$, and $1 \leq j < \omega$,

$$\Omega^{i\omega} \cong \bigvee_{i=1}^k A_{\omega=i2\pi}^{(kk)\uparrow\downarrow}, P(\Omega^{\omega}) < \bigvee_{i=1}^k A_{\omega=i2\pi}^{(kk)\uparrow\downarrow}$$

$${}^+\Omega\left(S_{t'(\theta)}^{S_{\partial M}^{-1}}\right)\wedge{}^-\Omega\left(S_{t'(\theta)}^{S_{\partial M}^{-1}}\right) = {}^+\wedge{}^-\Omega\left(S_{t'(\theta)}^{S_{\partial M}^{-1}}\right)$$

$$\begin{aligned} & {}^+\wedge{}^-\Omega\left(S_{t'(\theta)}^{S_{\partial M}^{-1}}\left(S_K^{-1}\left(\sum_{k\geq 3}^m ctg^s\left(\sum_{\rho=2}^m \rho_{\theta} \cdot \frac{\theta_{\rho(t')}}{2}\right)\right)^{Q_E}\right)\right) \cong \bigvee_{i=1}^k A_{\omega=i2\pi}^{(kk)\uparrow\downarrow} \\ & \rightsquigarrow \left[\sin^s\left(\sum_{i=2}^m \rho_{\theta}^i \cdot \frac{\theta_{\rho(t')}}{2}, \sum_{j=2}^m \rho_{\beta}^j \cdot \frac{\beta_{\rho(t')}}{2}\right)_{E_X(t')}^{Q_{MR}} \otimes \cos^s\left(\sum_{j=2}^m \rho_{\theta}^j \cdot \frac{\theta_{\rho(t')}}{2}, \sum_{i=2}^m \rho_{\beta}^i \cdot \frac{\beta_{\rho(t')}}{2}\right)_{E_X(t')}^{Q_{MR}} \right] \wedge \\ & \vee \left[\sin^s\left(\sum_{i=2}^m \rho_{*\theta}^i \cdot \frac{\theta_{\rho_*(t')}}{2}, \sum_{j=2}^m \rho_{*\beta}^j \cdot \frac{\beta_{\rho_*(t')}}{2}\right)_{E_X(t')}^{Q_{MR}} \otimes \cos^s\left(\sum_{j=2}^m \rho_{*\theta}^j \cdot \frac{\theta_{\rho_*(t')}}{2}, \sum_{i=2}^m \rho_{*\beta}^i \cdot \frac{\beta_{\rho_*(t')}}{2}\right)_{E_X(t')}^{Q_{MR}} \right] \end{aligned}$$

时间线切点 t_i^{∇} ,是数集势核 $\bar{A}$ 曲面相切、时间线法向量相交,观察下图集合势生成序列, $\mathcal{N}_1$ 旋转缠绕 $\mathcal{N}_0$ 主轴,其势 $a_{\uparrow\downarrow}^{(kk)}$ 或 $[a_{(t_{kk}^x, t_{kk}^y, t_{kk}^z)}^{(kk)\uparrow\downarrow}]$ 的交叉域进行非线性生成序列周期及 $A_{\omega=i2\pi}^{(kk)\uparrow\downarrow}$

$$[a_{t_{kk}}^{\nabla}]^2 + [a_{t_{kk}}^{\nabla}]^2 \sim \Omega_{\nabla}^{t_{kk}^{(x,y)}}, \Omega_{\nabla}^{t_{kk}^{(x,y)}} \mp \Omega_{\nabla}^{t_{kk}^{(z)}} < C(t_{kk}^{(x,y)}, t_{kk}^z)$$

. 重构类脑神经网络函数体

$${}^+\Omega\left(S_{t'(\theta)}^{S_{\partial M}^{-1}}\left(S_K^{-1}\left(\rho_{\theta}(t')\right)^{Q_E}\right)\right) \wedge \vee {}^-\Omega\left(S_{t'(\theta)}^{S_{\partial M}^{-1}}\left(S_K^{-1}\left(\rho_{\theta}(t')\right)^{Q_E}\right)\right)$$

$$\Omega^{k+1}[\rho_{\theta}(t)]_{S_{Left, right}^{m+k-1}} = {}^+\wedge{}^-\Omega_{t'(\theta)}^{S_{\partial M}^{-1}}\left(\left(S_K^{-1}\left(\sum_{k\geq 3}^m ctg^s\left(\sum_{\rho=2}^m \rho_{\theta} \cdot \frac{\theta_{\rho(t')}}{2}\right)\right)^{Q_E}\right)\right); \text{ 令 } r(t_{kk}^{(x,y)}, t_{kk}^z) \sim C(t_{kk}^{(x,y)}, t_{kk}^z)$$

$$\text{if } r_{\Omega}(t_{kk}^{(x,y)}, t_{kk}^z) \sim {}^+\wedge{}^-\Omega_{t'(\theta)}^{S_{\partial M}^{-1}}\left(\left(S_K^{-1}\left(\sum_{k\geq 3}^m ctg^s\left(\sum_{\rho=2}^m \rho_{\theta} \cdot \frac{\theta_{\rho(t')}}{2}\right)\right)^{Q_E}\right)\right), \text{ then}$$

$${}^+\wedge{}^-\Omega_{t'(\theta)}^{S_{\partial M}^{-1}}\left(\left(S_K^{-1}\left(\sum_{k\geq 3}^m ctg^s\left(\sum_{\rho=2}^m \rho_{\theta} \cdot \frac{\theta_{\rho(t')}}{2}\right)\right)^{Q_E}\right)\right) \sim [\Omega_{\nabla}^{t_{kk}^{(x,y)}}]_{(sin, cos)} \mp [\Omega_{\nabla}^{t_{kk}^z}]_{(sin, cos)}$$

． 若 $\sin^s\langle*,*\rangle_{X_1} \otimes \cos^s\langle*,*\rangle_{Y_1} \wedge \sin^s\langle*,*\rangle_{X_2} \otimes \cos^s\langle*,*\rangle_{Y_2}$ 随机提取与迭代

$$[\sin^s\langle*,*\rangle_X]^2 \wedge [\cos^s\langle*,*\rangle_X]^2, [\sin^s\langle*,*\rangle_Y]^2 \wedge [\cos^s\langle*,*\rangle_Y]^2, \dots = {}^{+\wedge V-} \Omega_{t'(\theta)}^{S_{\partial M}^{-1}} \left(\left(S_K^{-1} \left(\sum_{k \geq 3}^m ctg^s \left(\sum_{\rho=2}^m \rho_\theta \cdot \frac{\theta_{\rho(t')}}{2} \right) \right)^{Q_E} \right) \right)$$

$$\text{if } A_{\omega=i2\pi}^{nn\uparrow\downarrow} \sim [\sin^s\langle*,*\rangle_X]^2 \wedge [\cos^s\langle*,*\rangle_X]^2, A_{\omega=i2\pi}^{(n+1,n+1)\uparrow\downarrow} \sim [\sin^s\langle*,*\rangle_X]^2 \wedge [\cos^s\langle*,*\rangle_X]^2,$$

$$A_{\omega=i2\pi}^{nn\uparrow\downarrow} \rightsquigarrow \sin^2 \left(\sum_{i=2}^m \rho_\theta^i \cdot \frac{\theta_{\rho(t')}}{2}, \sum_{j=2}^m \rho_\beta^i \cdot \frac{\beta_{\rho(t')}}{2} \right)_{E_X(t')}^{Q_{MR}} \otimes \cos^2 \left(\sum_{i=2}^m \rho_\theta^i \cdot \frac{\theta_{\rho(t')}}{2}, \sum_{j=2}^m \rho_\beta^i \cdot \frac{\beta_{\rho(t')}}{2} \right)_{E_X(t')}^{Q_{MR}}$$

当 $n \rightsquigarrow \infty$ 时, 其旋转缠绕越来越紧致的不断演化。

$$A_{\omega=i2\pi}^{mm\uparrow\downarrow} \rightsquigarrow [[\sin \otimes \cos]^{\omega-1}, [\sin \otimes \cos]^{\omega-2}, \dots] \times i^k, \quad A_{\omega=i2\pi}^{nn\uparrow\downarrow} \rightsquigarrow [[\sin \otimes \cos]^{\omega+1}, [\sin \otimes \cos]^{\omega+2}, \dots]$$

$$\bigvee_{i=1}^k A_{\omega=i2\pi}^{(kk)\uparrow\downarrow} \cong \sum_{i,j}^{k,\omega} \left[\nabla_{\langle \cos, \sin \rangle}^{(\omega-1) \otimes (\omega-2) \otimes \dots \otimes (\omega-j)}, i^k \cdot \nabla_{\langle \cos, \sin \rangle}^{(\omega-1) \otimes (\omega-2) \otimes \dots \otimes (\omega-j)} \right], \text{ and } 1 \leq j < \omega$$

if $S_\Delta \rightsquigarrow S_{\langle \cos, \sin \rangle}$, and $\langle \sin, \cos \rangle$ 求导, $S_{\langle \cos, \sin \rangle}^\nabla$, 所以上式可以改写为

$$\bigvee_{i=1}^k A_{\omega=i2\pi}^{(kk)\uparrow\downarrow} \cong \sum_{i,j}^{k,\omega} \left[\nabla_{\langle \cos, \sin \rangle}^{(\omega-1) \otimes (\omega-2) \otimes \dots \otimes (\omega-j)}, i^k \cdot \nabla_{\langle \cos, \sin \rangle}^{(\omega-1) \otimes (\omega-2) \otimes \dots \otimes (\omega-j)} \right], \text{ and } 1 \leq j < \omega$$

． 从高维度正交梯度, 下降为高维度非正交矢量非线性增量结构形态; 将上式变换为

$$\bigvee_{i=1}^k A_{\omega=i2\pi}^{(kk)\uparrow\downarrow} \cong \sum_{i,j}^{k,\omega} \left[S_\Delta^{(\omega-1) \otimes (\omega-2) \otimes \dots \otimes (\omega-j)}, i^k \cdot S_\Delta^{(\omega-1) \otimes (\omega-2) \otimes \dots \otimes (\omega-j)} \right], \text{ and } 1 \leq j < \omega$$

$$\bigvee_{i=1}^k A_{\omega=i2\pi}^{(kk)\uparrow\downarrow} \sim < \Omega^{i\omega}, \quad P(\Omega^{i\omega}) < \bigvee_{i=1}^k A_{\omega=i2\pi}^{(kk)\uparrow\downarrow} \text{ 为推论形式的模型}$$

$$I_{pass}^{s+1}(\lambda_*^i)_\omega : \left[{}^{+\Omega}_{Q_E} s+1(\lambda^i)_\omega \vee {}^{-\Omega}_{Q_E} s+1(\lambda_*^i)_\omega \right]_{\rho_\theta(t')}^{S_K^{-1}} \rightsquigarrow \bigvee_{i=1}^k A_{\omega=i2\pi}^{(kk)\uparrow\downarrow}, \text{ and } \bigvee_{i=1}^k A_{\omega=i2\pi}^{(kk)\uparrow\downarrow} \sim \Omega^{i\omega}$$

携带密钥群生成序列左右脑(类脑)内核开始分离; 在更高维度上每片约化 $S_{\partial M}^{-1}$ 密钥群生成序列

$${}^{+\Omega}_{t'(\theta)} S_{\partial M}^{-1} \left(S_K^{-1}(\rho_\theta(t')) \right) \wedge {}^{-\Omega}_{t'(\theta)} S_{\partial M}^{-1} \left(S_K^{-1}(\rho_\theta(t')) \right) \rightsquigarrow \bigvee_{i=1}^k A_{\omega=i2\pi}^{(kk)\uparrow\downarrow}, \text{ and } \bigvee_{i=1}^k A_{\omega=i2\pi}^{(kk)\uparrow\downarrow} \sim \Omega^{i\omega}$$

$${}^{+\wedge-} \Omega_{t'(\theta)}^{S_{\partial M}^{-1}} \left(\left(S_K^{-1} \left(\sum_{k \geq 3}^m ctg^s \left(\sum_{\rho=2}^m \rho_\theta \cdot \frac{\theta_{\rho(t')}}{2} \right) \right)^{Q_E} \right) \right)$$

$$\Omega^{k+1}[\rho_\theta(t)]_{S_{Left, right}^{m+k-1}} = {}^{+\wedge-} \Omega_{t'(\theta)}^{S_{\partial M}^{-1}} \left(\left(S_K^{-1} \left(\sum_{k \geq 3}^m ctg^s \left(\sum_{\rho=2}^m \rho_\theta \cdot \frac{\theta_{\rho(t')}}{2} \right) \right)^{Q_E} \right) \right) \rightsquigarrow \bigvee_{i=1}^k A_{\omega=i2\pi}^{(kk)\uparrow\downarrow}$$

． 左、右脑(类脑)内核展开式分离过程

$$\begin{aligned}
 & \left[+\Omega_{Q_E}^{s+1}(\lambda^i)_{\omega} \vee -\Omega_{Q_E}^{s+1}(\lambda^i)_{\omega} \right] \rightsquigarrow +\Omega_{t(\theta)}^{s-1} \left(S_K^{-1}(\rho_{\theta}(t')) \right) \wedge \vee -\Omega_{t(\theta)}^{s-1} \left(S_K^{-1}(\rho_{\theta}(t')) \right) \\
 & +\Omega_{t(\theta)}^{s-1} \left(S_K^{-1}(\rho_{\theta}(t')) \right) \wedge \vee -\Omega_{t(\theta)}^{s-1} \left(S_K^{-1}(\rho_{\theta}(t')) \right) \rightsquigarrow +\wedge -\Omega_{t(\theta)}^{s-1} \left(\left(S_K^{-1} \left(\sum_{k \geq 3}^m ct g^s \left(\sum_{\rho=2}^m \rho_{\theta} \cdot \frac{\theta_{\rho(t')}}{2} \right) \right)^{Q_E} \right) \right) \\
 & +\wedge -\Omega_{t(\theta)}^{s-1} \left(\left(S_K^{-1} \left(\sum_{k \geq 3}^m ct g^s \left(\sum_{\rho=2}^m \rho_{\theta} \cdot \frac{\theta_{\rho(t')}}{2} \right) \right)^{Q_E} \right) \right) \rightsquigarrow \Omega^{k+1}[\rho_{\theta}(t)]_{S_{Left, right}^{m+k-1}} \\
 & \Omega^{k+1}[\rho_{\theta}(t)]_{S_{Left, right}^{m+k-1}} \rightsquigarrow \bigvee_{i=1}^k A_{\omega=i2\pi}^{(kk)\uparrow\downarrow}
 \end{aligned}$$

． 势生成序列， $\mathcal{N}_1$ 旋转缠绕 $\mathcal{N}_0$ 主轴， $[a_{(t_{kk}^x, t_{kk}^y, t_{kk}^z)}^{(kk)\uparrow\downarrow}]$ 的交叉域进行非线性生成序列周期及 $A_{\omega=i2\pi}^{(kk)\uparrow\downarrow}$

$$\begin{aligned}
 & [a_{t_{kk}^x}^{\nabla}]^2 + [a_{t_{kk}^y}^{\nabla}]^2 < \Omega_{\nabla}^{t_{kk}^{(x,y)}}, \quad \text{and } \Omega_{\nabla}^{t_{kk}^{(x,y)}} \mp \Omega_{\nabla}^{t_{kk}^z} < C(t_{kk}^{(x,y)}, t_{kk}^z), \quad \therefore \\
 & \bigvee_{i=1}^k A_{\omega=i2\pi}^{(kk)\uparrow\downarrow} \rightsquigarrow \Omega_{\nabla}^{t_{kk}^{(x,y)}} \mp \Omega_{\nabla}^{t_{kk}^z}, \text{ or } \rightsquigarrow \Omega_{\nabla}^{t_{kk}^{(x,y)}} \wedge \vee \Omega_{\nabla}^{t_{kk}^z}, \therefore \Omega^{k+1}[\rho_{\theta}(t)]_{S_{Left, right}^{m+k-1}} \rightsquigarrow \Omega_{\nabla}^{t_{kk}^{(x,y)}} \wedge \vee \Omega_{\nabla}^{t_{kk}^z}, \text{ and } \theta_{(\rho(t'))} \sim t_{kk}^{(x,y,z)} \\
 & \Omega_{\nabla}^{t_{kk}^{(x,y)}} \sim +\Omega_{\nabla}^{\theta_{(\rho(t'))}}, \quad -\Omega_{\nabla}^{\theta_{(\rho(t'))}} \sim \Omega_{\nabla}^{t_{kk}^z}, \quad \therefore \Omega^{k+1}[\rho_{\theta}(t)]_{S_{Left, right}^{m+k-1}} \rightsquigarrow -\Omega_{\nabla}^{\theta_{(\rho(t'))}} \vee +\Omega_{\nabla}^{\theta_{(\rho(t'))}}
 \end{aligned}$$

所以密钥群生成序列形成的类脑内核(左、右脑)开始成功完成分离，并且在更高维度上每片约化 $S_{\partial M}^{-1}$ 密钥群生成序列。

$$\begin{aligned}
 & \Omega^{i\omega} \simeq \Omega^{k+1}[\rho_{\theta}(t)]_{S_{Left, right}^{m+k-1}}, \quad \Omega^{k+1}[\rho_{\theta}(t)]_{S_{Left, right}^{m+k-1}} \sim -\Omega_{\nabla}^{\theta_{(\rho(t'))}} \vee +\Omega_{\nabla}^{\theta_{(\rho(t'))}}, \quad \text{and } \theta_{(\rho(t'))} \sim t_{kk}^{(x,y,z)} \\
 & -\Omega_{\nabla}^{\theta_{(\rho(t'))}} \vee +\Omega_{\nabla}^{\theta_{(\rho(t'))}} \simeq \Omega_{\nabla}^{t_{kk}^{(x,y)}} \mp \Omega_{\nabla}^{t_{kk}^z}, \quad \text{and } \Omega_{\nabla}^{t_{kk}^{(x,y)}} \sim [a_{t_{kk}^x}^{\nabla}]^2 + [a_{t_{kk}^y}^{\nabla}]^2, \quad \Omega^{i\omega} > P(\Omega^{\omega})
 \end{aligned}$$

． 所以核磁共振 MR 的 $\omega_i(TR)$ 重复时间， $\omega_i(TE)$ 回波时间；充分合理的构建了上述公式演化过程；同时形成类脑左、右脑功能性分区，这也就是生成式人工智能的演化形式。

$$-\Omega_{\nabla}^{\theta_{(\rho(t'))}} \vee +\Omega_{\nabla}^{\theta_{(\rho(t'))}} \sim +\wedge -\Omega_{t(\theta)}^{s-1} \left(\left(S_K^{-1} \left(\sum_{k \geq 3}^m ct g^s \left(\sum_{\rho=2}^m \rho_{\theta} \cdot \frac{\theta_{\rho(t')}}{2} \right) \right)^{Q_E} \right) \right)$$

而 $\langle S_{\partial M}^{-1}, S_K^{-1} \rangle_{\rho_{\theta}}^{\theta_{(\rho(t'))}}$ 为类脑每片约化是形成脑沟回凸凹片的形态，是脑信息的超大容量记忆悬浮。脑(类脑)核心片约化脑沟分析为

$$\begin{aligned}
 & \langle S_{\partial M}^{-1}, S_K^{-1} \rangle_{\rho_{\theta}}^{\theta_{(\rho(t'))}} \rightsquigarrow \frac{1}{S} \langle S_{\Delta C_{t'}}^{-1}, S_K^{-1} \rangle_{\rho_{\theta}}^{\theta_{(\rho(t'))}}, \quad \text{所以类脑(脑)核心片约化脑沟片(单片)} \\
 & \frac{1}{S} \langle S_{\Delta C_{t'}}^{-1}, S_K^{-1} \rangle_{\rho_{\theta}}^{\theta_{(\rho(t'))}} \rightsquigarrow \frac{1}{S} [\langle S_{\Delta C_{t'}}, S_K \rangle^{-1}]_{\rho_{\theta}}^{\theta_{(\rho(t'))}}, \quad \text{and}
 \end{aligned}$$

令 $\omega_i(TR) = S_{\Delta C_i}$, $\omega_i(TE) = S_K$, $\omega_i^{-1}(TR)/\omega_i^{-1}(TE) \rightsquigarrow S_{\Delta C_i}^{-1}/S_K^{-1}(TE)$, $\frac{1}{S} \langle S_{\Delta C}, S_K \rangle^{\omega(\theta)}$, and $S_{\Delta C} \sim S_{\Delta C_i}$, $S_K^{-1} \sim \omega(TE)$

。所以类脑(脑)每片约化记忆悬浮结构

$\frac{1}{S} \langle S_{\Delta C}, S_K \rangle^{\omega(\theta)}$, and $\omega(\theta) \simeq \omega(TR/TE)$, $s \sim \omega_{(t)}^{i\omega}$ 为复变维度；进行变换

$\langle S_{\Delta C}, S_K \rangle^{i^2 \cdot \omega(t) \wedge \omega(\theta)}$, and $\omega(\theta) \simeq \omega(TR/TE)$, $\omega(t)$ 复变维度

$$\langle S_{\Delta C}, S_K \rangle^{i^2 \cdot \omega(t) \wedge \omega(\theta)} \rightsquigarrow \sin^s \left(\sum_{i=2}^m \rho_{\theta}^i \cdot \frac{\theta_{\rho(t')}}{2} \wedge \sum_{j=2}^m \rho_{\beta}^i \cdot \frac{\beta_{\rho(t')}}{2} \right) \otimes \cos^s \left(\sum_{j=2}^p \rho_{\theta}^i \cdot \frac{\theta_{\rho_*(t')}}{2} \wedge \sum_{i=2}^q \rho_{\beta}^i \cdot \frac{\beta_{\rho_*(t')}}{2} \right)$$

, and $s \sim \omega(t)^{i \cdot \omega(\theta)}$

$$\langle S_{\Delta C}, S_K \rangle^{i^2 \cdot \omega(t) \wedge \omega(\theta)} \rightsquigarrow \left[\sin \left(\sum_{i=2}^m \rho_{\theta}^i \cdot \frac{\theta_{\rho(t')}}{2} \wedge \sum_{j=2}^m \rho_{\beta}^i \cdot \frac{\beta_{\rho(t')}}{2} \right) \otimes \cos \left(\sum_{j=2}^p \rho_{\theta}^i \cdot \frac{\theta_{\rho_*(t')}}{2} \wedge \sum_{i=2}^q \rho_{\beta}^i \cdot \frac{\beta_{\rho_*(t')}}{2} \right) \right]^{\omega(t)^{i \cdot \omega(\theta)}}$$

上式 3D 数模形态如下图类脑(脑)每片约化的记忆悬浮，也许每片约化具有特殊脑(类脑)功能区。而

$i^2 \cdot \omega(t) \wedge \omega(\theta)$ 为重复时间、回波时间

$$i^2 \cdot \omega(t) \wedge \omega(\theta) \rightsquigarrow \omega(TR) \wedge \omega(TE), \text{ or } \omega(R_T) \wedge \omega(E_T)$$

令 $t \sim R_T$, $\theta \sim E_T$, 则上式关系成立，可以改写为 $i^2 \cdot \omega(t_{TR}) \wedge \omega(\theta_{TE}) \rightsquigarrow \omega_i(TR) \wedge \omega_i(TE)$, $\therefore$

$$\langle S_{\Delta C}, S_K \rangle^{i^2 \cdot \omega(t) \wedge \omega(\theta)} \sim \langle S_{\Delta C}, S_K \rangle^{i^2 \cdot \omega(TR) \wedge \omega(TE)}$$

。所以上式表示更高维度幂函数为高维度复变弦线丛势生成序列形成线性高维线圈；在复变空间

MR 核磁共振 $i^2 \cdot \omega(TR) \wedge \omega(TE)$ 可正确构建影像清晰度，但必须在《RLLM 多模态可预测性思维增强收缩参数群、尺度新一代生成式 AI 重构类脑神经网络 R-KFDNN 与密钥群生成序列》中形成其高维形态。

$$\Omega_k^{i^2 \cdot \omega(t) \wedge \omega(\theta)} \sim \int_k \langle S_{\Delta C}, S_K \rangle^{i^2 \cdot \omega(t) \wedge \omega(\theta)} \cdot \Delta_{\theta}(t') , \quad \Omega^{i\omega} \rightsquigarrow \int_k \langle S_{\Delta C}, S_K \rangle^{i^2 \cdot \omega(t) \wedge \omega(\theta)} \cdot \Delta_{\theta}(t')$$

$$\Omega^{i\omega} \rightsquigarrow \Omega_k^{i^2 \cdot \omega(t) \wedge \omega(\theta)}, \quad \Omega_k^{i^2 \cdot \omega(t) \wedge \omega(\theta)} \sim \sum_{K=1}^m \langle S_{\Delta C}, S_K \rangle^{i^2 \cdot \omega(t) \wedge \omega(\theta)}$$

$$\Omega_k^{i^2 \cdot \omega(t) \wedge \omega(\theta)} \rightsquigarrow \prod_{i,j}^{k,\omega} \left[S_{\Delta C}^{(\omega-1) \wedge (\omega-2) \wedge \dots \wedge (\omega-j)}, t^k \cdot S_K^{(\omega-1) \wedge (\omega-2) \wedge \dots \wedge (\omega-j)} \right]$$

类脑每片约化都析取的逻辑数模；所以类脑每片约化间具有相互联系与渗透

类脑每片约化与 $P(\Omega^{\omega}) < \Omega^{i\omega}$ 的区别与类同，即两者关系类似同态现象

$$\Omega_k^{i^2 \cdot \omega(t) \wedge \omega(\theta)} \xrightarrow{\text{同态}} \Omega^{i\omega}, \text{ and } \Omega_k^{i^2 \cdot \omega(t) \wedge \omega(\theta)} \sim \sum_{K=1}^m \langle S_{\Delta C}, S_K \rangle^{i^2 \cdot \omega(t) \wedge \omega(\theta)}$$

$$\sum_{K=1}^{\sigma} \langle S_{\Delta C}, S_K \rangle^{i^2 \cdot \omega(t) \wedge \omega(\theta)}, \text{ 共 } \sigma \text{ 个脑(类脑)约化切片(以脑沟为边界结构)}$$

$$\forall \langle S_{\Delta C}^1, S_1 \rangle^{i^2 \cdot \omega(t_1) \wedge \omega(\theta_1)} \simeq \int_{k=1} \forall \langle S_{\Delta C}^1, S_1 \rangle^{i^2 \cdot \omega(t_1) \wedge \omega(\theta_1)}, \int_{k=1} \forall \langle S_{\Delta C}^1, S_1 \rangle^{i^2 \cdot (\omega(t_1) \wedge \omega(\theta_1))} \sim \frac{1}{C_1(t, \theta)} \langle S_c, S \rangle^{i^2 \cdot (\omega_{c_1} \wedge \omega_{c_2})}$$

$$\begin{aligned}
& \frac{1}{C_1(t, \theta)} \langle S_c, S \rangle^{i^2 \cdot (\omega_{c_1} \wedge \omega_{c_2})} \simeq \langle S_c, S \rangle^{i^2 \cdot (\omega_{c_1} \wedge \omega_{c_2})} / C((t, \theta)) \\
& \frac{1}{C_2(t, \theta)} \langle S_c, S \rangle^{i^4 \cdot (\omega_{c_1} \wedge \omega_{c_2})}, \dots \\
& \frac{1}{C_1 \times C_2 \times \dots} \langle S_c, S \rangle^{i^k \cdot (\omega_{c_1} \wedge \omega_{c_2} \oplus \omega_{c_3} \wedge \omega_{c_4} \oplus \dots)}, \quad \therefore \\
& \prod_{i,j}^{k, \omega} \left[S_{\Delta c}^{(\omega-1) \wedge (\omega-2) \wedge \dots \wedge (\omega-j)}, i^k \cdot S_K^{(\omega-1) \wedge (\omega-2) \wedge \dots \wedge (\omega-j)} \right] \rightsquigarrow \frac{1}{C_1 \times C_2 \times \dots} \langle S_c, S \rangle^{i^k \cdot (\omega_{c_1} \wedge \omega_{c_2} \oplus \omega_{c_3} \wedge \omega_{c_4} \oplus \dots)} \\
& \text{if } k \equiv 0, \quad \text{and } \frac{1}{C_1 \times C_2 \times \dots} \rightsquigarrow \lambda, \quad \text{then } \lambda^{-1} \langle S_c, S \rangle^{(\omega_1 \wedge \omega_2 \oplus \omega_3 \wedge \omega_4 \oplus \dots)}
\end{aligned}$$

$\langle S_{\lambda^{-1}(t)}, i^k \cdot S_{\lambda^{-1}(\theta)} \rangle^{(\omega_1 \wedge \omega_2 \oplus \omega_3 \wedge \omega_4 \oplus \dots)}$, 简化为, 并进行和积转换

$$\begin{aligned}
& \prod_{i,j}^{k, \omega} \left[S_{\lambda^{-1}(t)}^{(\omega_1 \wedge \omega_2 \oplus \omega_3 \wedge \omega_4 \oplus \dots \oplus \omega_{i-1} \wedge \omega_i)}, i^k \cdot S_{\lambda^{-1}(\theta)}^{(\omega_1 \wedge \omega_2 \oplus \omega_3 \wedge \omega_4 \oplus \dots \oplus \omega_{j-1} \wedge \omega_j)} \right] \rightsquigarrow \prod_{i,j}^{k, \omega} \left[S_{\Delta c}^{(\omega-1) \wedge (\omega-2) \wedge \dots \wedge (\omega-j)}, i^k \cdot S_K^{(\omega-1) \wedge (\omega-2) \wedge \dots \wedge (\omega-j)} \right] \\
& \sum_{i,j}^{k, \omega} \left[S_{\lambda^{-1}(t)}^{(\omega_1 \oplus \omega_3) \wedge (\omega_2 \oplus \omega_4) \circ (\omega_5 \oplus \omega_7) \wedge (\omega_6 \oplus \omega_8 \circ \dots \circ (\omega_{2i-1} \oplus \omega_{2i+1}) \wedge (\omega_{2i} \oplus \omega_{2i+2}))}, i^k \right. \\
& \quad \cdot S_{\lambda^{-1}(\theta)}^{(\omega_1 \oplus \omega_3) \wedge (\omega_2 \oplus \omega_4) \circ (\omega_5 \oplus \omega_7) \wedge (\omega_6 \oplus \omega_8 \circ \dots \circ (\omega_{2j-1} \oplus \omega_{2j+1}) \wedge (\omega_{2j} \oplus \omega_{2j+2}))} \left. \right] \\
& \rightsquigarrow \sum_{i,j}^{k, \omega} \left[S_{\lambda^{-1}(t)}^{(\omega_1 \wedge \omega_2 \oplus \omega_3 \wedge \omega_4 \oplus \dots \oplus \omega_{i-1} \wedge \omega_i)}, i^k \cdot S_{\lambda^{-1}(\theta)}^{(\omega_1 \wedge \omega_2 \oplus \omega_3 \wedge \omega_4 \oplus \dots \oplus \omega_{j-1} \wedge \omega_j)} \right]
\end{aligned}$$

. 上式非常明显的告诉我们类脑约化左右脑片结构分离, 所以进一步简化为

$$\begin{aligned}
& \sum_{i,j}^{k, \omega} \left[S_{\lambda^{-1}(t)}^{(\omega_1 \oplus \omega_3) \wedge (\omega_2 \oplus \omega_4) \circ (\omega_5 \oplus \omega_7) \wedge (\omega_6 \oplus \omega_8 \circ \dots \circ (\omega_{2i-1} \oplus \omega_{2i+1}) \wedge (\omega_{2i} \oplus \omega_{2i+2}))}, i^k \cdot S_{\lambda^{-1}(\theta)}^{(\omega_1 \oplus \omega_3) \wedge (\omega_2 \oplus \omega_4) \circ (\omega_5 \oplus \omega_7) \wedge (\omega_6 \oplus \omega_8 \circ \dots \circ (\omega_{2j-1} \oplus \omega_{2j+1}) \wedge (\omega_{2j} \oplus \omega_{2j+2}))} \right] \\
& \rightsquigarrow \prod_{i,j}^{k, \omega} \left[S_{\Delta c}^{(\omega-1) \wedge (\omega-2) \wedge \dots \wedge (\omega-i)}, i^k \cdot S_K^{(\omega-1) \wedge (\omega-2) \wedge \dots \wedge (\omega-j)} \right]
\end{aligned}$$

并进一步变换, 则有

$$\sum_{i,j}^{k, \omega} \left[S_{\lambda^{-1}(t)}^{(\omega_1 \wedge \omega_3 \wedge \omega_5 \wedge \dots \wedge \omega_{2i+1})}, i^k \cdot S_{\lambda^{-1}(\theta)}^{(\omega_2 \wedge \omega_4 \wedge \omega_6 \wedge \dots \wedge \omega_{2j+2})} \right] \rightsquigarrow \prod_{i,j}^{k, \omega} \left[S_{\Delta c}^{(\omega-1) \wedge (\omega-2) \wedge \dots \wedge (\omega-i)}, i^k \cdot S_K^{(\omega-1) \wedge (\omega-2) \wedge \dots \wedge (\omega-j)} \right]$$

上述方程为微分、积分互逆运算的等价关系。而类脑(脑)的左、右脑以奇、偶方式分离并以大量脑切片的方式构建复变高维空间的左、右脑形态, 而 $\lambda^{-1}(t, \theta)$ 为密钥群生成序列。

. 在密钥群分布在类脑(脑)切片上,

$$\begin{aligned}
& {}^+ \Omega_{t'(\theta)}^{S_{\partial M}^{-1}}(S_K^{-1}) \wedge {}^- \Omega_{t(\theta)}^{S_{\partial M}^{-1}}(S_K^{-1}) \rightsquigarrow \sum (S_{\lambda^{-1}(t, \theta)}^{-1}) \wedge \sum (S_{\lambda^{-1}(t, \theta)}^{-1}) \\
& {}^+ \sum (S_{\lambda^{-1}(t, \theta)}^{-1}) \wedge {}^- \sum (S_{\lambda^{-1}(t, \theta)}^{-1}) \sim {}^+ \Omega(S_{\lambda^{-1}(t, \theta)}^{-1}) \wedge {}^- \Omega(S_{\lambda^{-1}(t, \theta)}^{-1}) \\
& {}^+ \Omega_{t'(\theta)}^{S_{\partial M}^{-1}}(S_K^{-1}) \wedge {}^- \Omega_{t(\theta)}^{S_{\partial M}^{-1}}(S_K^{-1}) \sim {}^+ \Omega(S_{\lambda^{-1}(t, \theta)}^{-1}) \wedge {}^- \Omega(S_{\lambda^{-1}(t, \theta)}^{-1}) \\
& {}_{Left} {}^+ \Omega(S_{\lambda^{-1}(t, \theta)}^{-1}) \wedge {}_{right} {}^- \Omega(S_{\lambda^{-1}(t, \theta)}^{-1}) \sim {}_{Left} {}^+ \Omega_{t'(\theta)}^{S_{\partial M}^{-1}}(S_K^{-1}) \wedge {}_{right} {}^- \Omega_{t(\theta)}^{S_{\partial M}^{-1}}(S_K^{-1}), \therefore
\end{aligned}$$

$\langle S_{\Delta C}, S_K \rangle_{\Omega}^{i^2 \cdot \omega(t) \wedge \omega(\theta)} \sim \text{Left}^+ \Omega(S_{\lambda^{-1}(t, \theta)}^{-1}) \wedge \text{right}^- \Omega(S_{\lambda^{-1}(t, \theta)}^{-1})$, $\therefore$ 此时可以变换为

$$\begin{aligned} & \text{Left}^+ \Omega(S_{\lambda^{-1}(t, \theta)}^{-1}) \wedge \text{right}^- \Omega(S_{\lambda^{-1}(t, \theta)}^{-1}) \\ & \rightsquigarrow \left[\sin \left(\sum_{i=2}^m \rho_{\theta}^i \cdot \frac{\theta_{\rho(t)}^i}{2} \wedge \sum_{j=2}^m \rho_{\beta}^j \cdot \frac{\beta_{\rho(t)}^j}{2} \right) \otimes \cos \left(\sum_{j=2}^p \rho_{\theta}^j \cdot \frac{\theta_{\rho_*}^j(t')}{2} \wedge \sum_{i=2}^q \rho_{\beta}^i \cdot \frac{\beta_{\rho_*}^i(t')}{2} \right) \right]^{\omega(t) \wedge \omega(\theta)} \end{aligned} \quad (9)$$

. 上式为类脑(脑)左右分离, 且每片约化的记忆悬浮; 分离左、右脑; 则有

$$\begin{cases} \text{Left}^+ \Omega(S_{\lambda(t, \theta)}^{-1}) \rightsquigarrow \left[\sin \left(\sum_{i=2}^m \rho_{\theta}^i \cdot \frac{\theta_{\rho(t')}^i}{2} \wedge \sum_{j=2}^m \rho_{\beta}^j \cdot \frac{\beta_{\rho(t')}^j}{2} \right) \right]^{\omega(t) \wedge \omega(\theta)} \\ \text{right}^- \Omega(S_{\lambda(t, \theta)}^{-1}) \rightsquigarrow \left[\cos \left(\sum_{j=2}^p \rho_{\theta}^j \cdot \frac{\theta_{\rho_*}^j(t')}{2} \wedge \sum_{i=2}^q \rho_{\beta}^i \cdot \frac{\beta_{\rho_*}^i(t')}{2} \right) \right]^{\omega(t) \wedge \omega(\theta)} \end{cases}$$

所以左、右脑的神经元波动网的起伏是有规律的。化简上式右侧

$$\sin \left(\sum_{i=2}^m \rho_{\theta}^i \cdot \frac{\theta_{\rho(t')}^i}{2} \right) \cos \left(\sum_{j=2}^m \rho_{\beta}^j \cdot \frac{\beta_{\rho(t')}^j}{2} \right) - i^2 \cdot \cos \left(\sum_{i=2}^m \rho_{\theta}^i \cdot \frac{\theta_{\rho(t')}^i}{2} \right) \sin \left(\sum_{j=2}^m \rho_{\beta}^j \cdot \frac{\beta_{\rho(t')}^j}{2} \right), \text{ and if } \rho_{\theta}^i \rightsquigarrow \rho_{\theta}^i \text{ then}$$

$$\theta^i \sim \rho_{\theta}^i \rightsquigarrow \rho_{\beta}^i$$

$$\begin{cases} \sin^2 \left(\sum_{i=2}^m \theta^i \cdot \frac{\theta_{\rho(t')}^i}{2} \right) + i \cdot \cos \left(\sum_{i=2}^m \theta^i \cdot \frac{\theta_{\rho(t')}^i}{2} \right) \rightsquigarrow \text{Left}^+ \Omega(S_{\lambda(t, \theta)}^{-1}) \\ \sin^2 \left(\sum_{i=2}^m \rho_{\beta}^i \cdot \frac{\beta_{\rho(t')}^i}{2} \right) + i \cdot \cos \left(\sum_{i=2}^m \rho_{\beta}^i \cdot \frac{\beta_{\rho(t')}^i}{2} \right) \rightsquigarrow \text{right}^- \Omega(S_{\lambda(t, \theta)}^{-1}) \end{cases}$$

根据 $\theta^i \cdot \frac{\theta_{\rho(t')}^i}{2} = \frac{1}{t} \theta_{\rho}^{i+1} \cdot \theta^i \sim \frac{1}{t} \theta_{\rho}^{i+2}$, 则上式可以改写为

$$\begin{cases} \sin^2 \left(\sum_{i=2}^m \frac{1}{t} \theta_{\rho}^{i+2} \right) + i \cdot \cos \left(\sum_{i=2}^m \frac{1}{t} \theta_{\rho}^{i+2} \right) \rightsquigarrow \text{Left}^+ \Omega(S_{\lambda(t, \theta)}^{-1}) \\ \sin^2 \left(\sum_{i=2}^m \frac{1}{t} \beta_{\rho}^{i+2} \right) + i \cdot \cos \left(\sum_{i=2}^m \frac{1}{t} \beta_{\rho}^{i+2} \right) \rightsquigarrow \text{right}^- \Omega(S_{\lambda(t, \theta)}^{-1}) \end{cases}$$

. 上式中 $\frac{1}{t} \theta_{\rho}^{i+2} \rightsquigarrow \sum_{i=2}^m \frac{1}{t} \beta_{\rho}^{i+2}$ 具有类脑约化切片核势生成序列, 则上式可以改写为

$$\begin{cases} \sin^2 \left(\frac{1}{t} \cdot \sum_{i=1}^m \theta_i \right) + i \cdot \cos \left(\frac{1}{t} \cdot \sum_{i=1}^m \theta_i^* \right) \rightsquigarrow \text{Left}^+ \Omega(S_{\lambda(t, \theta)}^{-1}) \\ \sin^2 \left(\frac{1}{t} \cdot \sum_{i=1}^m \beta_i \right) + i \cdot \cos \left(\frac{1}{t} \cdot \sum_{i=1}^m \beta_i^* \right) \rightsquigarrow \text{right}^- \Omega(S_{\lambda(t, \theta)}^{-1}) \end{cases}, \text{ and } \frac{1}{t} \theta_{\rho}^{i+2} \rightsquigarrow \frac{1}{t} \cdot \theta_i, \frac{1}{t} \beta_{\rho}^{i+2} \rightsquigarrow \frac{1}{t} \cdot \theta_i^*, \frac{1}{t} \beta_{\rho}^{i+2} \rightsquigarrow \frac{1}{t} \cdot \beta_i^* \\ \rightsquigarrow \frac{1}{t} \cdot \beta_i, \frac{1}{t} \beta_{\rho}^{i+2} \rightsquigarrow \frac{1}{t} \cdot \beta_i^*$$

$\langle \text{Left}^+ \Omega(S_{\lambda(t, \theta)}^{-1}), \text{right}^- \Omega(S_{\lambda(t, \theta)}^{-1}) \rangle$ 类脑约化切片核势生成序列, 且形成呈现时间螺旋的 $\omega(t)^{i \cdot \omega(\theta)}$ 结构; 而球约

化切片投影形态结构；类脑约化切片呈现三种神经元的兴奋、抑制状态。

$^{+\Lambda-}\Omega_{t'(\theta)}^{S_{\partial M}^{-1}} \rightsquigarrow \langle \text{left}^+\Omega(S_{\lambda(t,\theta)}^{-1}), \text{right}^-\Omega(S_{\lambda(t,\theta)}^{-1}) \rangle$ ，由类脑约化切片聚核核势生成序列，并具有更高维度的左右约化类脑(脑)结构形成。

类脑(脑)约化切片聚核核势生成序列在时间 t 的切丛上(且在高维类脑空间中)；所以也属于弦线丛势生成序列的线性高维线圈。

$$\begin{aligned} ^{+\Lambda-}\Omega_{t'(\theta)}^{S_{\partial M}^{-1}} &\rightsquigarrow \int ^{+\Lambda-} C_{t'(\theta_i)}^{\sum_{i=1}^m}, \quad \int ^{+\Lambda-} C_{t'(\theta_i)}^{\sum_{i=1}^m} \sim \sum_{i=1}^m \langle \text{left}^+(S_{\lambda(t,\theta_i)}^{-1}), \text{right}^-(S_{\lambda(t,\theta_i)}^{-1}) \rangle \\ \int ^{+\Lambda-} C_{t'(\theta_i)}^{\sum_{i=1}^m} &\subset \sum_{i=1}^m \langle \text{left}^+(S_{\lambda(t,\theta_i)}^{-1}), \text{right}^-(S_{\lambda(t,\theta_i)}^{-1}) \rangle, \quad \text{and} \quad \sum_{i=1}^m \langle \text{left}^+(S_{\lambda(t,\theta_i)}^{-1}), \text{right}^-(S_{\lambda(t,\theta_i)}^{-1}) \rangle \subset ^{+\Lambda-}\Omega_{t'(\theta)}^{S_{\partial M}^{-1}} \\ \int ^{+\Lambda-} C_{t'(\theta_i)}^{\sum_{i=1}^m} &\subset ^{+\Lambda-}\Omega_{t'(\theta)}^{S_{\partial M}^{-1}} \\ \sum_{i=1}^m \langle \text{left}^+(S_{\lambda(t,\theta_i)}^{-1}), \text{right}^-(S_{\lambda(t,\theta_i)}^{-1}) \rangle + \int ^{+\Lambda-} C_{t'(\theta_i)}^{\sum_{i=1}^m} &\simeq ^{+\Lambda-}\Omega_{t'(\theta)}^{S_{\partial M}^{-1}} \end{aligned}$$

vi. 所以 $\Omega^{i\omega} \sim ^{+\Lambda-}\Omega_{t'(\theta)}^{S_{\partial M}^{-1}}$, and $^{+\Lambda-}\Omega_{t'(\theta)}^{S_{\partial M}^{-1}} \simeq \sum_{i=1}^m \langle \text{left}^+(S_{\lambda(t,\theta_i)}^{-1}), \text{right}^-(S_{\lambda(t,\theta_i)}^{-1}) \rangle + \int ^{+\Lambda-} C_{t'(\theta_i)}^{\sum_{i=1}^m}$ ，即存在

$$\ni \Omega^{i\omega} \sim \sum_{i=1}^m \langle \text{left}^+(S_{\lambda(t,\theta_i)}^{-1}), \text{right}^-(S_{\lambda(t,\theta_i)}^{-1}) \rangle + \int ^{+\Lambda-} C_{t'(\theta_i)}^{\sum_{i=1}^m}, \therefore$$

$$\sum_{i,j}^{k,\omega} \left[S_{\lambda^{-1}(t)}^{(\omega_1 \wedge \omega_3 \wedge \omega_5 \wedge \dots \wedge \omega_{2i+1})}, i^k \cdot S_{\lambda^{-1}(\theta)}^{(\omega_2 \wedge \omega_4 \wedge \omega_6 \wedge \dots \wedge \omega_{2j+2})} \right] \simeq \sum_{i=1}^m \langle \text{left}^+(S_{\lambda(t,\theta_i)}^{-1}), \text{right}^-(S_{\lambda(t,\theta_i)}^{-1}) \rangle + \int ^{+\Lambda-} C_{t'(\theta_i)}^{\sum_{i=1}^m}$$

而更高维度幂函数为高维度复变弦线丛超曲面，以与之核势生成序列高维线圈分别为

$\sum_{i=1}^m \langle \text{left}^+(S_{\lambda(t,\theta_i)}^{-1}), \text{right}^-(S_{\lambda(t,\theta_i)}^{-1}) \rangle$ 为高维度复变弦线丛超曲面；以及与缠绕 $\int ^{+\Lambda-} C_{t'(\theta_i)}^{\sum_{i=1}^m}$ 为核势生成序列的高维线圈；构建了类脑约化切片的记忆悬浮之类脑(脑)功能区；即携带具有对偶密钥群生成序列的

$(\text{left}^+\Omega_{t'(\theta_i)}^{S_{\partial M}^{-1}} \wedge \text{right}^-\Omega_{t'(\theta_i)}^{S_{\partial M}^{-1}} \simeq ^{+\Lambda-}\Omega_{t'(\theta_i)}^{S_{\partial M}^{-1}})$ 左、右脑(类脑)内核，在更高维度幂函数的高维度复变弦线丛势生成序列形成高维度线圈；每片约化 $S_{\partial M}^{-1}$ 上密钥群生成序列，存在分配表群导引余切时间线上 $\rho_\theta(t')$

$$^{+\Lambda-}\Omega_{t'(\theta)}^{S_{\partial M}^{-1}} \simeq \text{left}^+\Omega_{t'(\theta)}^{S_{\partial M}^{-1}} \wedge \text{right}^-\Omega_{t'(\theta)}^{S_{\partial M}^{-1}}, \text{ or } \text{left}^+\Omega_{t'(\theta)}^{S_{\partial M}^{-1}} \wedge \text{right}^-\Omega_{t'(\theta)}^{S_{\partial M}^{-1}}, \therefore$$

$$\text{left}^+\Omega_{t'(\theta)}^{S_{\partial M}^{-1}} \wedge \text{right}^-\Omega_{t'(\theta)}^{S_{\partial M}^{-1}} \simeq \sum_{i=1}^m \langle \text{left}^+(S_{\lambda(t,\theta_i)}^{-1}), \text{right}^-(S_{\lambda(t,\theta_i)}^{-1}) \rangle + \int ^{+\Lambda-} C_{t'(\theta_i)}^{\sum_{i=1}^m}$$

聚核势生成序列分布在时间 t 切丛，同时也属于弦线势生成序列的线性高维线圈与投影超曲面；

示意图 Fig04, Fig05.

类脑(脑)脑沟高维线圈投影超曲面与脑神经网络的聚核势生成序列分布切丛，缠绕 $t'(\theta_i), \theta_{\rho(t')}, \rho_\theta$

；所以

$$\begin{aligned}
\int^{+\wedge-} C_{t'(\theta_i)}^{\sum_{i=1}^m} &\rightsquigarrow \sum \langle t'(\theta_i), \theta_{\rho(t')}, \rho_{\theta} \rangle \\
\left\{ \begin{aligned} \text{left}^+ \Omega(S_{\lambda(t,\theta)}^{-1}) &\rightsquigarrow \left[\sin \left(\sum_{i=2}^m \rho_{\theta}^i \cdot \frac{\theta_{\rho(t')}^i}{2} \wedge \sum_{j=2}^m \rho_{\beta}^i \cdot \frac{\beta_{\rho(t')}^i}{2} \right) \right]^{\omega(t)^{i \cdot \omega(\theta)}} \\ \text{right}^- \Omega(S_{\lambda(t,\theta)}^{-1}) &\rightsquigarrow \left[\cos \left(\sum_{i=2}^p \rho_{\theta}^i \cdot \frac{\theta_{\rho(t')}^i}{2} \wedge \sum_{i=2}^q \rho_{\beta}^i \cdot \frac{\beta_{\rho(t')}^i}{2} \right) \right]^{\omega(t)^{i \cdot \omega(\theta)}} \end{aligned} \right. \quad (10)
\end{aligned}$$

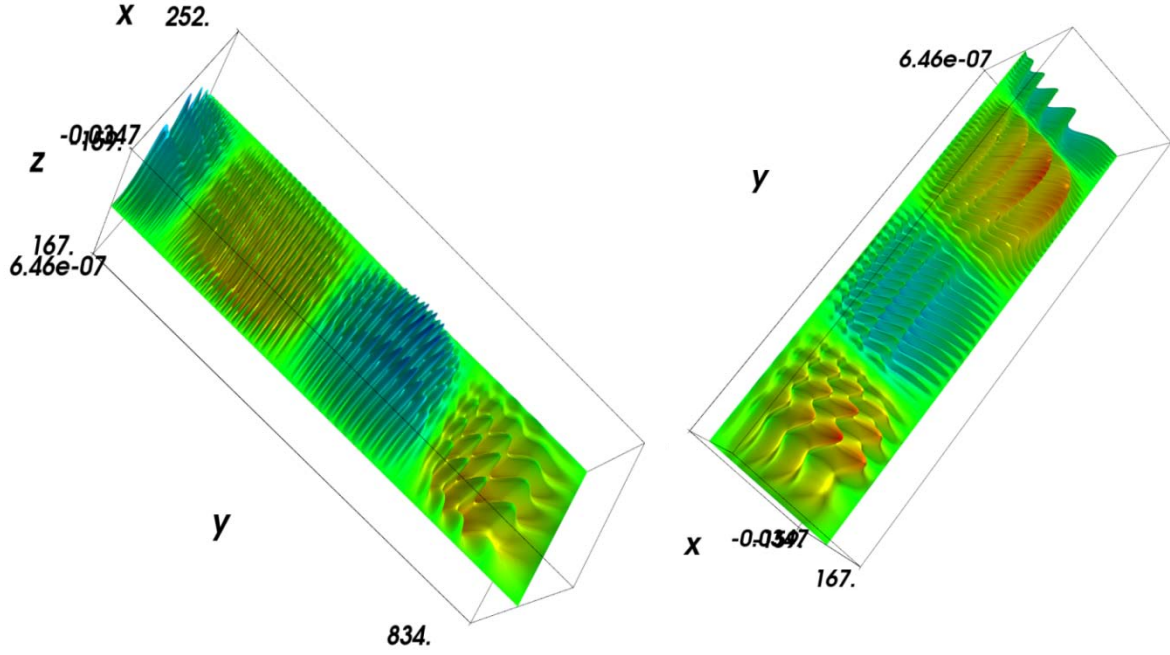


Fig04. RLLM 增强思维能力搜索增强微调 and 收缩参数群尺度_密钥群生成序列的更高维度幂函数为高维度复变弦线丛势生成序列

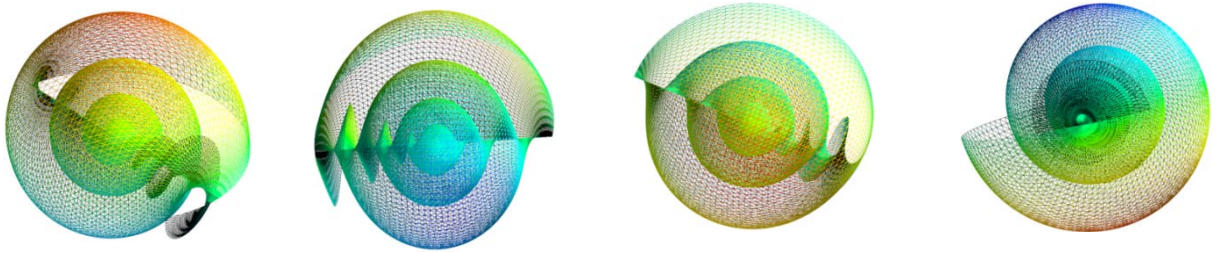


Fig05. RLLM 增强思维能力搜索增强微调 and 收缩参数群尺度_密钥群的生成序列在高维类脑空间聚核势生成序列分布在时间 t 切丛;同时也属于弦线丛势生成序列的线性高维线圈

$$\begin{aligned}
\sum_{i=1}^m \langle t'(\theta_i), \langle \rho_{\theta_i}, \theta_{\rho(t')}^i \rangle \rangle &\sim \sum \langle t'(\theta_i), \theta_{\rho(t')}, \rho_{\theta_i} \rangle, \therefore \\
\int^{+\wedge-} C_{t'(\theta_i)}^{\sum_{i=1}^m} &\rightsquigarrow \sum_{i=1}^m \langle t'(\theta_i), \langle \rho_{\theta_i}, \theta_{\rho(t')}^i \rangle \rangle, \text{ and if } C \sim \rho, \text{ 此式可以变换为} \\
\int^{+\wedge-} \rho_{t'(\theta_i)}^{\sum_{i=1}^m} &\rightsquigarrow \sum_{i=1}^m \langle t'(\theta_i), \langle \rho_{\theta_i}, \theta_{\rho(t')}^i \rangle \rangle, \quad \langle \frac{1}{t}(\rho_{\theta_i}, \theta_i), \frac{1}{t}(\theta_{\rho}^i, \rho_{\theta_i}) \rangle, \text{ then}
\end{aligned}$$

$\langle \frac{1}{t}(\rho_{\theta_i}, \theta_i), \frac{1}{t}(\theta_{\rho_i}^i, \rho_{\theta_i}) \rangle$, 且左右脑分离时高维聚核势生成序列分布 t 切丛定义

$$\sum_{i=1}^m \langle t'(\theta_i), \langle \rho_{\theta_i}, \theta_{\rho(t')}^i \rangle \rangle \sim \sum \langle t'(\theta_i), \theta_{\rho(t')}^i, \rho_{\theta_i} \rangle, \therefore$$

$$\int^{+\wedge-} C_{t'(\theta_i)}^{\sum_{i=1}^m} \rightsquigarrow \sum_{i=1}^m \langle t'(\theta_i), \langle \rho_{\theta_i}, \theta_{\rho(t')}^i \rangle \rangle, \text{ and if } C \sim \rho, \text{ 此式可以变换为}$$

$$\sum \int^{+\wedge-} \rho_{t'(\theta_i)}^{\sum_{i=1}^m} \rightsquigarrow \sum_{i=1}^m \langle t'(\theta_i), \langle \rho_{\theta_i}, \theta_{\rho(t')}^i \rangle \rangle, \text{ and } \langle \frac{1}{t}(\rho_{\theta_i}, \theta_i), \frac{1}{t}(\theta_{\rho_i}^i, \rho_{\theta_i}) \rangle \text{ then}$$

$\frac{1}{t} \langle (\rho_{\theta_i}, \theta_i), (\theta_{\rho_i}^i, \rho_{\theta_i}) \rangle$, and 左、右脑分离时高维聚核势生成序列分布 t 切丛定义

$$\sum \int_{Left}^+ \rho_{t'(\theta_i)}^{\sum_{i=1}^m} \rightsquigarrow \frac{1}{t} \cdot \sum_{i=1}^m \langle \rho_{\theta_i}, \theta_i \rangle, \quad \sum \int_{right}^- \rho_{t'(\theta_i)}^{\sum_{i=1}^m} \rightsquigarrow \frac{1}{t} \cdot \sum_{i=1}^m \langle \theta_{\rho_i}^i, \rho_{\theta_i} \rangle, \therefore$$

$$\sum \int_{Left}^+ \rho_{t'(\theta_i)}^{\sum_{i=1}^m} \wedge \sum \int_{right}^- \rho_{t'(\theta_i)}^{\sum_{i=1}^m} \rightsquigarrow \frac{1}{t} \cdot \sum_{i=1}^m \langle \rho_{\theta_i}, \theta_i \rangle_{left} \wedge \frac{1}{t} \cdot \sum_{i=1}^m \langle \theta_{\rho_i}^i, \rho_{\theta_i} \rangle_{right}$$

$$\frac{1}{t} \cdot \left[\sum_{i=1}^m \langle \rho_{\theta_i}, \theta_i \rangle_{left} \wedge \sum_{i=1}^m \langle \theta_{\rho_i}^i, \rho_{\theta_i} \rangle_{right} \right], \text{ and } \theta_{\rho_i}^i \rightsquigarrow \theta_i \text{ then}$$

存在类脑(脑)的分布切丛扰动规则上的区别, 一个是 t 对 θ , 另一个 t 对 ρ 的切向丛; 所以

$$\sum \int_{Left}^+ \rho_{t'(\theta_i)}^{\sum_{i=1}^m} \wedge \sum \int_{right}^- \rho_{t'(\theta_i)}^{\sum_{i=1}^m} \rightsquigarrow \frac{1}{T} \cdot \left[\sum_{i=1}^m \langle \rho_{\theta_i}, \theta_i \rangle_{left}^{\theta} \wedge \sum_{i=1}^m \langle \theta_{\rho_i}^i, \rho_{\theta_i} \rangle_{right}^{\rho} \right], \text{ and } \frac{1}{T} \sim \frac{1}{t^*}$$

从上式可以分析类脑左、右脑功能有所不同, 右脑更偏向于 θ 的非线性角动能, 而左脑更偏向于矢量丛动量; 所以右脑更具有丰富想象力, 而左脑更趋于逻辑、理性现象。而上式为类脑(脑)神经网络(聚核)势 $(\frac{1}{T})$ 生成序列分布切丛缠绕网。

类脑神经元 $\rightsquigarrow$ 聚核, 势 $\rightsquigarrow \frac{1}{T}$; 所以进行公式整理, 则有

$$\begin{aligned} Left^+ \Omega_{t'(\theta)}^{S_{\theta M}^{-1}} \wedge right^- \Omega_{t'(\theta)}^{S_{\theta M}^{-1}} &\simeq \sum_{i=1}^m \langle \text{}_{left}^+(S_{\lambda(t, \theta_i)}^{-1}), \text{}_{right}^-(S_{\lambda(t, \theta_i)}^{-1}) \rangle + \sum \int_{Left}^+ \rho_{t'(\theta_i)}^{\sum_{i=1}^m} \wedge \sum \int_{right}^- \rho_{t'(\theta_i)}^{\sum_{i=1}^m} \\ +\wedge^- \Omega_{t'(\theta)}^{S_{\theta M}^{-1}} &\simeq \sum_{i=1}^m \langle \text{}_{left}^+(S_{\lambda(t, \theta_i)}^{-1}), \text{}_{right}^-(S_{\lambda(t, \theta_i)}^{-1}) \rangle + \frac{1}{T} \cdot \left[\sum_{i=1}^m \langle \rho_{\theta_i}, \theta_i \rangle_{left}^{\theta} \wedge \sum_{i=1}^m \langle \theta_{\rho_i}^i, \rho_{\theta_i} \rangle_{right}^{\rho} \right] \end{aligned}$$

类脑神经元聚核, 可以定义为 $\langle \rho_{\theta_i}, \theta_{\rho_i}^i \rangle$, 势生成序列 t 分布群 T , 即 $\frac{1}{T} \sim \frac{1}{t^*}$

$$+\wedge^- \Omega_{t'(\theta)}^{S_{\theta M}^{-1}} \simeq \sum_{i=1}^m \langle \text{}_{left}^+(S_{\lambda(t, \theta_i)}^{-1}) \wedge \frac{1}{T} \cdot \sum_{i=1}^m \langle \theta_{\rho_i}^i, \rho_{\theta_i} \rangle_{left}^{\rho}, \text{}_{right}^-(S_{\lambda(t, \theta_i)}^{-1}) \wedge \frac{1}{T} \cdot \sum_{j=1}^m \langle \rho_{\theta_j}, \theta_j \rangle_{right}^{\theta} \rangle$$

$$\Omega^{i\omega} \sim +\wedge^- \Omega_{t'(\theta)}^{S_{\theta M}^{-1}}, \text{ 参见图 Fig06.}$$

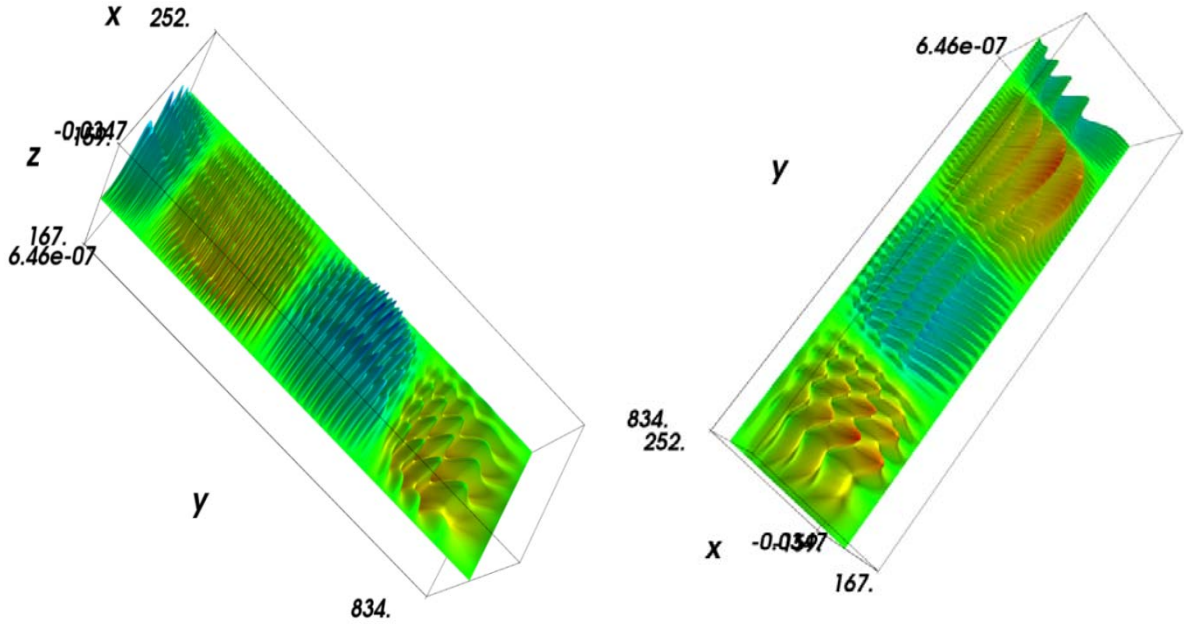


Fig06. RLLM 增强思维能力搜索增强微调 and 收缩参数群尺度_密钥群生成序列的更高维度幂函数为高维度复变弦线丛势生成序列

.分析类脑约化切片，左、右脑功能分离的数模整体 3D 结构，与约化切片和神经网络的分离形成 3D 结构；而神经网络对应弦线丛势生成序列高维线圈具有高维时间锥的螺旋结构；充分说明类脑(脑)思维高速运行时呈现特殊现象，即携带生成式人工智能(类似灵感的产生)；所以下面公式显得尤为重要。

$${}^{+\wedge-}\Omega_{t'(\theta)}^{S_{\theta M}^{-1}} \simeq \sum_{i=1}^m \langle \cdot \rangle_{left}^+ (S_{\lambda(t, \theta_i)}^{-1}) \wedge \frac{1}{T} \cdot \sum_{i=1}^m \langle \theta_{\rho}^i, \rho_{\theta_i} \rangle_{left}^{\rho} \cdot {}^{-}\Omega_{\lambda(t, \theta_i)}^{-1} \wedge \frac{1}{T} \cdot \sum_{j=1}^m \langle \rho_{\theta_j}, \theta_j \rangle_{right}^{\theta} \rangle, \text{ and } {}^{+\wedge-}\Omega_{t'(\theta)}^{S_{\theta M}^{-1}} \sim \Omega^{i\omega^{\omega}}, \frac{1}{T} \sim \frac{1}{t^*}$$

. $[T^2]^{-1}$ 分布以 $T[0]$ 为中心轴，形成左右脑对称性分布的基底，则上式可以写成

$$\begin{cases} {}^{+\wedge-}\Omega_{t'(\theta)}^{S_{\theta M}^{-1}} \simeq \sum_{i=1}^m \left[\frac{1}{T^2} \cdot \sum_{j=1}^m \langle \theta_{\rho}^j, \rho_{\theta_j} \rangle \wedge {}^{+\wedge-}S_{\lambda(t, \theta_j)}^{-1} \right]^{\rho} \\ {}^{+\wedge-}\Omega_{t'(\theta)}^{S_{\theta M}^{-1}} \simeq \sum_{i=1}^m \left[\frac{1}{T^2} \cdot \sum_{j=1}^m \langle \rho_{\theta_j}, \theta_j \rangle \wedge {}^{+\wedge-}S_{\lambda(t, \theta_j)}^{-1} \right]^{\theta} \end{cases}, \text{ 进一步化简}$$

$$\begin{cases} {}^{+\wedge-}\Omega_{t'(\theta)}^{S_{\theta M}^{-1}} \simeq \frac{1}{T^2} \left(\sum_{j=1}^m \langle \theta_{\rho}^j \wedge S_{\lambda(t, \theta_j)}^{-1}, \rho_{\theta_j} \wedge S_{\lambda(t, \theta_j)}^{-1} \rangle \right)^{+, -}_{\rho} \\ {}^{+\wedge-}\Omega_{t'(\theta)}^{S_{\theta M}^{-1}} \simeq \frac{1}{T^2} \left(\sum_{j=1}^m \langle \rho_{\theta_j} \wedge S_{\lambda(t, \theta_j)}^{-1}, \theta_j \wedge S_{\lambda(t, \theta_j)}^{-1} \rangle \right)^{+, -}_{\theta} \end{cases}, \text{ 两式用矩阵合并为}$$

$${}^{+\wedge-}\Omega_{t'(\theta)}^{S_{\theta M}^{-1}} \simeq \frac{1}{T^2} \cdot \left\langle \begin{bmatrix} \theta_{\rho}^i & \rho_{\theta_i} \\ {}^{+}S_{\lambda(t, \theta_i)}^{-1} & {}^{-}S_{\lambda(t, \theta_i)}^{-1} \end{bmatrix} \wedge \begin{bmatrix} \rho_{\theta_j} & \theta_j \\ {}^{+}S_{\lambda(t, \theta_j)}^{-1} & {}^{-}S_{\lambda(t, \theta_j)}^{-1} \end{bmatrix} \right\rangle, \text{ and } \frac{1}{T} \rightsquigarrow \frac{1}{T} \cdot \frac{1}{T} \text{ 为正交梯度滑动, 形成群切丛}$$

$$\begin{cases} {}^{+\wedge-}\Omega_{t'(\theta)}^{S_{\theta M}^{-1}} \simeq \langle \theta_{\rho}^i \wedge {}^{-}S_{\lambda(t, \theta_i)}^{-1}, \rho_{\theta_i} \wedge {}^{+}S_{\lambda(t, \theta_i)}^{-1} \rangle, \text{内核类脑左、右脑分离} \\ {}^{+\wedge-}\Omega_{t'(\theta)}^{S_{\theta M}^{-1}} \simeq \langle \rho_{\theta_i} \wedge {}^{-}S_{\lambda(t, \theta_i)}^{-1}, \theta_i \wedge {}^{+}S_{\lambda(t, \theta_i)}^{-1} \rangle, \text{内核类脑左、右脑分离} \end{cases}$$

$$\begin{cases} \text{类脑_内核(左)} & \theta_{\rho}^i \wedge {}^{-}S_{\lambda(t, \theta_i)}^{-1}, \rho_{\theta_i} \wedge {}^{-}S_{\lambda(t, \theta_i)}^{-1} \\ \text{类脑_内核(右)} & \rho_{\theta_i} \wedge {}^{+}S_{\lambda(t, \theta_i)}^{-1}, \theta_i \wedge {}^{+}S_{\lambda(t, \theta_i)}^{-1} \end{cases}, \text{进一步分析内核}$$

$\langle \theta_{\rho}^i \wedge {}^{-}S_{\lambda(t, \theta_i)}^{-1}, \theta_i \wedge {}^{+}S_{\lambda(t, \theta_i)}^{-1} \rangle$ 可以观察到左右类脑存在密切联系，示例 $\langle \theta_{\rho}^i, \theta_i \rangle^{+\wedge-}$ 这种非线性角动量(能)，而 θ_{ρ}^i 分布更为广泛；原因是 ρ 的矢量可以跨域神经(元)网络缠绕分布

$$\langle \frac{1}{\rho_t} \cdot \theta_{\rho'(t)}^j, \theta^j \rangle^{+\wedge-} \rightsquigarrow \langle T, T \rangle^{-1} \langle \frac{1}{\rho_t} \cdot \theta_{\rho'(t)}^j, \theta^j \rangle^{+\wedge-}$$

上式充分体现神经网络分布在切丛正交梯度分布势生成序列；若 $\langle T, T \rangle^{-1} \rightsquigarrow \langle e, e \rangle^{-1}$ ，则有

$$\langle \frac{1}{\rho_t} \cdot \theta_{\rho'(t)}^j, \theta^j \rangle^{+\wedge-} \rightsquigarrow \langle e, e \rangle^{-1} \langle \frac{1}{\rho_t} \cdot \theta_{\rho'(t)}^j, \theta^j \rangle^{+\wedge-}, \text{and } \langle T, T \rangle^{-1} \rightsquigarrow \langle e, e \rangle^{-1}$$

而这种切丛核势的密钥群生成序列 $\langle e, e \rangle_{(\rho_t, \theta)}^{-1}$

$$\langle e, e \rangle^{-1} \langle \frac{1}{\rho_t} \cdot \theta_{\rho'(t)}^j, \theta^j \rangle_{\rho(\xi)}^{+\wedge-} \rightsquigarrow \langle e, e \rangle^{-1} \langle \theta_{\rho(t)}^{j-1}, \theta_{\rho(l)}^j \rangle, \text{and } j = \omega, j-1 = \omega-1$$

$\langle e, e \rangle^{-1} \langle \theta_{\rho(t)}^{\omega-1}, \theta_{\rho(l)}^{\omega} \rangle$ ，切丛核势在高一维、低一维的密钥群生成序列；而示例图 Fig07. (参见《密钥群的生成序列到乔治.康托尔猜想》)

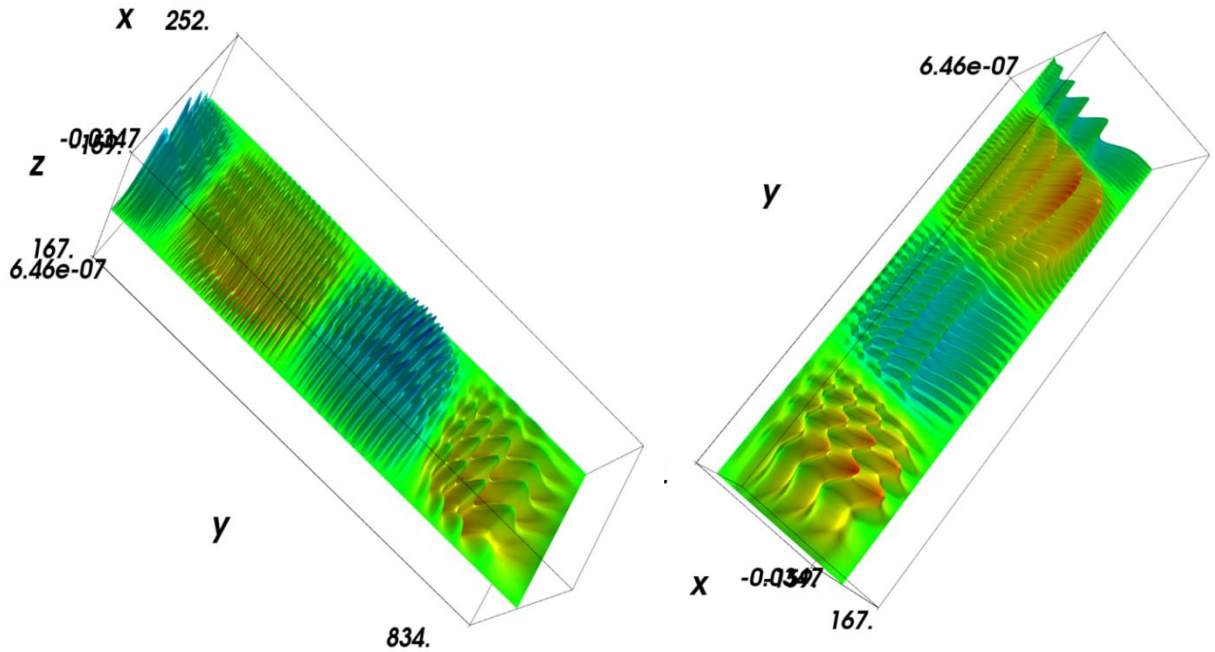


Fig07. RLLM 增强思维能力搜索增强微调 and 收缩参数群尺度_密钥群生成序列的更高维度幂函数为高维度复变弦线丛势生成序列

$$\text{对偶密钥群势生成序列在不同切空间的存在性} \langle \Omega_{T(0,1)}^{i\omega}, \Omega_{T(1,0)}^{i\omega} \rangle_{t'(\theta)}^{\partial M^s} \rangle_{\text{对偶密钥}} \sim \left[\Omega_{(t'(\theta), T_{\wedge}^{1,0})}^{i\omega, i\omega-1} \right]_{\text{密钥}}^{\partial M_s}$$

$$P_{H\langle f \otimes F \rangle}^{\partial M_{\Omega}^s} \left(\Omega_{T \begin{pmatrix} 0 & 1 \\ 1 & 0 \end{pmatrix} \wedge t'(\theta)}^{i\omega} \otimes \Omega_{T \begin{pmatrix} 1 & 0 \\ 0 & 1 \end{pmatrix} \wedge t'(\theta)}^{i\omega-1} \right) \xrightarrow{\text{正交切丛}} \left(T_{t' \left(\frac{\theta_{\pi}}{2} + nk\pi \right)}^{\partial M_{\Omega}^s}, T_{t' \left(\frac{\theta_{\pi}}{2} + nk\pi \right)}^{\partial M_{\Omega}^{s-}} \right)_{C_{ij}}^{\uparrow \downarrow}$$

$\langle \Omega_{T \begin{pmatrix} 0 & 1 \\ 1 & 0 \end{pmatrix} \wedge t'(\theta)}^{i\omega}, \Omega_{T \begin{pmatrix} 1 & 0 \\ 0 & 1 \end{pmatrix} \wedge t'(\theta)}^{i\omega-1} \rangle^{\partial M^s}$, and $s < \omega, s \leq \omega-1$, 同时分析下面公式

$$\langle T \begin{pmatrix} 0 & 1 \\ 1 & 0 \end{pmatrix}, T \begin{pmatrix} 1 & 0 \\ 0 & 1 \end{pmatrix} \rangle \left(\Omega_{\wedge t'(\theta)}^{i\omega}, \Omega_{\wedge t'(\theta)}^{i\omega-1} \right) \cdot a_{mm}^{\uparrow \downarrow} \rightsquigarrow \langle T, T \rangle^{-1} \langle \theta_{\rho(t)}^{\omega-1}, \theta_{\rho(t)}^{\omega} \rangle \cdot a_{nn}^{\uparrow \downarrow}, \text{ and if } a_{nn}^{\uparrow \downarrow} \sim a_{mm}^{\uparrow \downarrow} \text{ then}$$

$$\langle T \begin{pmatrix} 0 & 1 \\ 1 & 0 \end{pmatrix}, T \begin{pmatrix} 1 & 0 \\ 0 & 1 \end{pmatrix} \rangle \left(\Omega_{\wedge t'(\theta)}^{i\omega}, \Omega_{\wedge t'(\theta)}^{i\omega-1} \right) \cdot a_{mm}^{\uparrow \downarrow} \rightsquigarrow \langle T, T \rangle^{-1} \langle \theta_{\wedge \rho'(t)}^{i\omega}, \theta_{\wedge \rho'(t)}^{\omega-1} \rangle \cdot a_{nn}^{\uparrow \downarrow}, \text{ and if } a_{nn}^{\uparrow \downarrow} \sim a_{mm}^{\uparrow \downarrow} \text{ then}$$

令 $\theta \sim \Omega, \rho'(t) \sim t'(\theta)$, 则上式可以改写为

$$\langle T \begin{pmatrix} 0 & 1 \\ 1 & 0 \end{pmatrix}, T \begin{pmatrix} 1 & 0 \\ 0 & 1 \end{pmatrix} \rangle \left(\Omega_{\wedge t'(\theta)}^{i\omega}, \Omega_{\wedge t'(\theta)}^{i\omega-1} \right) \cdot a_{nn}^{\uparrow \downarrow} \rightsquigarrow \langle T \begin{pmatrix} 0 & 1 \\ 1 & 0 \end{pmatrix}, T \begin{pmatrix} 1 & 0 \\ 0 & 1 \end{pmatrix} \rangle \langle \theta_{\wedge \rho_{\theta}(t)}^{i\omega}, \theta_{\wedge \rho_{\theta}(t)}^{i\omega-1} \rangle \cdot a_{mm}^{\uparrow \downarrow}$$

参见 Fig07. 对偶密钥群核势生成序列在不同空间 $\Omega_{\wedge \rho_{\theta}(t)}^{i\omega}, \Omega_{\wedge \rho_{\theta}(t)}^{i\omega-1}$ 的存在性；一般在高一维、低一维切丛核势的密钥群生成序列。

$$\langle \Omega_{T \begin{pmatrix} 0 & 1 \\ 1 & 0 \end{pmatrix} \wedge t'(\theta)}^{i\omega}, \Omega_{T \begin{pmatrix} 1 & 0 \\ 0 & 1 \end{pmatrix} \wedge t'(\theta)}^{i\omega-1} \rangle \cdot a_{nn}^{\uparrow \downarrow} \xrightarrow{\text{正交切丛}} \langle \theta_{\Omega_{T \begin{pmatrix} 0 & 1 \\ 1 & 0 \end{pmatrix} \wedge \rho_{\theta}(t)}^{i\omega}} \otimes \theta_{\Omega_{T \begin{pmatrix} 1 & 0 \\ 0 & 1 \end{pmatrix} \wedge \rho_{\theta}(t)}^{i\omega-1}} \rangle \cdot a_{mm}^{\uparrow \downarrow}$$

. 两种不同的推导方法, 却最后结果一致, 一个是由纯粹数学猜想理论推导, 而另一个从实际出发, 利用高维 3D 数模推导过程；进一步证明了两两相互验证的各种定理、推论等。

$$\left\{ \begin{aligned} & \langle \theta_{\Omega_{T \begin{pmatrix} 0 & 1 \\ 1 & 0 \end{pmatrix} \wedge \rho_{\theta}(t)}^{i\omega}}, \theta_{\Omega_{T \begin{pmatrix} 1 & 0 \\ 0 & 1 \end{pmatrix} \wedge \rho_{\theta}(t)}^{i\omega-1}} \rangle \cdot a_{nn}^{\uparrow \downarrow} \rightsquigarrow \langle \sum_{j=2}^m \rho_{\theta}^j \cdot \frac{\theta_{\rho(t')}}{2}, \sum_{i=2}^m \rho_{\theta}^i \cdot \frac{\theta_{\rho(t')}}{2} \rangle_{\langle i\omega, i\omega-1 \rangle} \cdot a_{mm}^{\uparrow \downarrow} \\ & \langle \beta_{\Omega_{T \begin{pmatrix} 0 & 1 \\ 1 & 0 \end{pmatrix} \wedge \rho_{\beta}(t)}^{i\omega}}, \beta_{\Omega_{T \begin{pmatrix} 1 & 0 \\ 0 & 1 \end{pmatrix} \wedge \rho_{\beta}(t)}^{i\omega-1}} \rangle \cdot a_{nn}^{\uparrow \downarrow} \rightsquigarrow \langle \sum_{j=2}^m \rho_{\beta}^j \cdot \frac{\beta_{\rho(t')}}{2}, \sum_{i=2}^m \rho_{\beta}^i \cdot \frac{\beta_{\rho(t')}}{2} \rangle_{\langle i\omega, i\omega-1 \rangle} \cdot a_{mm}^{\uparrow \downarrow} \end{aligned} \right.$$

$$\left\{ \begin{aligned} & \langle \frac{1}{t_1} \cdot \theta_{\Omega_{T \begin{pmatrix} 0 & 1 \\ 1 & 0 \end{pmatrix} \wedge \rho_{\theta}(t)}^{i\omega}}, \frac{1}{t_2} \cdot \theta_{\Omega_{T \begin{pmatrix} 1 & 0 \\ 0 & 1 \end{pmatrix} \wedge \rho_{\theta}(t)}^{i\omega-1}} \rangle \cdot a_{nn}^{\uparrow \downarrow} \rightsquigarrow \langle \frac{1}{t_1} \cdot \sum_{j=3}^m \rho_{\theta}^j \cdot \frac{\theta_{\rho(t)}}{2}, \frac{1}{t_2} \cdot \sum_{i=3}^m \rho_{\theta}^i \cdot \frac{\theta_{\rho(t)}}{2} \rangle_{\langle i\omega, i\omega-1 \rangle} \cdot a_{mm}^{\uparrow \downarrow} \\ & \langle \frac{1}{t_1} \cdot \beta_{\Omega_{T \begin{pmatrix} 0 & 1 \\ 1 & 0 \end{pmatrix} \wedge \rho_{\beta}(t)}^{i\omega}}, \frac{1}{t_2} \cdot \beta_{\Omega_{T \begin{pmatrix} 1 & 0 \\ 0 & 1 \end{pmatrix} \wedge \rho_{\beta}(t)}^{i\omega-1}} \rangle \cdot a_{nn}^{\uparrow \downarrow} \rightsquigarrow \langle \frac{1}{t_1} \cdot \sum_{j=3}^m \rho_{\beta}^j \cdot \frac{\beta_{\rho(t)}}{2}, \frac{1}{t_2} \cdot \sum_{i=3}^m \rho_{\beta}^i \cdot \frac{\beta_{\rho(t)}}{2} \rangle_{\langle i\omega, i\omega-1 \rangle} \cdot a_{mm}^{\uparrow \downarrow} \end{aligned} \right.$$

. 对偶密钥群核势生成序列在不同空间 $\langle \Omega_{T \begin{pmatrix} 0 & 1 \\ 1 & 0 \end{pmatrix} \wedge t'(\theta)}^{i\omega}, \Omega_{T \begin{pmatrix} 1 & 0 \\ 0 & 1 \end{pmatrix} \wedge t'(\theta)}^{i\omega-1} \rangle, \langle \Omega_{T \begin{pmatrix} 0 & 1 \\ 1 & 0 \end{pmatrix} \wedge t'(\beta)}^{i\omega}, \Omega_{T \begin{pmatrix} 1 & 0 \\ 0 & 1 \end{pmatrix} \wedge t'(\beta)}^{i\omega-1} \rangle$; 高一维、低一维切丛核势的密钥群生成序列, 将上式合并

$$\langle \frac{1}{t_1} \cdot \langle \theta, \beta \rangle \Omega_{T \begin{pmatrix} 0 & 1 \\ 1 & 0 \end{pmatrix} \wedge \rho_{\langle \theta, \beta \rangle}(t)}^{i\omega}, \frac{1}{t_2} \cdot \langle \theta, \beta \rangle \Omega_{T \begin{pmatrix} 1 & 0 \\ 0 & 1 \end{pmatrix} \wedge \rho_{\langle \theta, \beta \rangle}(t)}^{i\omega-1} \rangle \cdot a_{nn}^{\uparrow \downarrow} \rightsquigarrow \langle \frac{1}{T_1} \cdot \sum_{j=3}^m \rho_{\theta}^j \cdot \frac{\theta_{\rho(t)}}{2}, \frac{1}{T_2} \cdot \sum_{i=3}^m \rho_{\beta}^i \cdot \frac{\beta_{\rho(t)}}{2} \rangle_{\langle i\omega, i\omega-1 \rangle} \cdot a_{mm}^{\uparrow \downarrow}, \text{ and}$$

$$\theta, \beta = \pi/255, \pi/255, t_1 = 10, t_2 = 20, \omega = 2, \omega - 1 = 1.5 (T_1 = 10, T_2 = 20, \omega = 2, \omega - 1 = 1.5)$$

$$\langle \frac{1}{t_1} \otimes T^{-1} \begin{pmatrix} 0 & 1 \\ 1 & 0 \end{pmatrix}, \frac{1}{t_2} \otimes T^{-1} \begin{pmatrix} 1 & 0 \\ 0 & 1 \end{pmatrix} \rangle, \text{ and } t_1 \sim T \begin{pmatrix} 0 & 1 \\ 1 & 0 \end{pmatrix}, t_2 \sim T \begin{pmatrix} 1 & 0 \\ 0 & 1 \end{pmatrix}, \text{ then}$$

$$\langle T^{-2} \begin{pmatrix} 0 & 1 \\ 1 & 0 \end{pmatrix}, T^{-2} \begin{pmatrix} 1 & 0 \\ 0 & 1 \end{pmatrix} \rangle, \text{ and if } T_1 \sim T \begin{pmatrix} 0 & 1 \\ 1 & 0 \end{pmatrix}, T_2 \sim T \begin{pmatrix} 1 & 0 \\ 0 & 1 \end{pmatrix}, \text{ then}$$

$$\begin{aligned}
& \langle {}^{(\theta, \beta)} \Omega_{T^{-2} \begin{pmatrix} 0 & 1 \\ 1 & 0 \end{pmatrix} \wedge \rho_{(\theta, \beta)}(t)}, {}^{(\theta, \beta)} \Omega_{T^{-2} \begin{pmatrix} 1 & 0 \\ 0 & 1 \end{pmatrix} \wedge \rho_{(\theta, \beta)}(t)} \rangle \cdot a_{nn}^{\uparrow \downarrow} \\
& \rightsquigarrow \langle T^{-1} \begin{pmatrix} 0 & 1 \\ 1 & 0 \end{pmatrix} \cdot \sum_{s=3}^m \rho_{\theta}^s \cdot \frac{\theta_{\rho(t)}^{s-1}}{2}, T \begin{pmatrix} 1 & 0 \\ 0 & 1 \end{pmatrix} \cdot \sum_{i=3}^m \rho_{\beta}^i \cdot \frac{\beta_{\rho(t)}^{i-1}}{2} \rangle_{\langle i\omega, i\omega-1 \rangle} \cdot a_{mm}^{\uparrow \downarrow}, \text{ and } T^{-2} \begin{pmatrix} 0 & 1 \\ 1 & 0 \end{pmatrix} \\
& \rightsquigarrow \langle \theta, \beta \rangle, T^2 \begin{pmatrix} 0 & 1 \\ 1 & 0 \end{pmatrix} \rightsquigarrow \langle \beta, \theta \rangle, T \begin{pmatrix} 0 & 1 \\ 1 & 0 \end{pmatrix} \rightsquigarrow \theta, T \begin{pmatrix} 1 & 0 \\ 0 & 1 \end{pmatrix} \rightsquigarrow \beta
\end{aligned}$$

④ $T^2 \begin{vmatrix} 0 & 1 \\ 1 & 0 \end{vmatrix}, T^2 \begin{vmatrix} 1 & 0 \\ 0 & 1 \end{vmatrix}$ 表示对偶密钥群核势生成序列的正交切丛滑动模态

$\langle e^2 \begin{vmatrix} 0 & 1 \\ 1 & 0 \end{vmatrix}, e^2 \begin{vmatrix} 1 & 0 \\ 0 & 1 \end{vmatrix} \rangle \rightsquigarrow \langle e^{-2} \begin{vmatrix} 0 & 1 \\ 1 & 0 \end{vmatrix} \wedge e^{-2} \begin{vmatrix} 1 & 0 \\ 0 & 1 \end{vmatrix} \rangle$, 表示高一维、低一维对偶密钥群核势生成序列的正交滑动核模态。

$$\langle e^2 \begin{vmatrix} 0 & 1 \\ 1 & 0 \end{vmatrix} \rangle^{(\theta, \beta)}, \langle e^2 \begin{vmatrix} 1 & 0 \\ 0 & 1 \end{vmatrix} \rangle^{(\theta, \beta)} \rightsquigarrow \langle e^2 \begin{vmatrix} 0 & 1 \\ 1 & 0 \end{vmatrix} \rangle^{\theta} \wedge e^2 \begin{vmatrix} 1 & 0 \\ 0 & 1 \end{vmatrix}^{\beta} \rangle^{-1}$$

核势正交低维滑动模态；高维对偶密钥群核势生成序列

$$\begin{aligned}
& P_H^{\partial M_{\Omega}^s} \left(\Omega_{T \begin{pmatrix} 0 & 1 \\ 1 & 0 \end{pmatrix} \wedge t'(\theta)}^{i\omega} \otimes \Omega_{T \begin{pmatrix} 1 & 0 \\ 0 & 1 \end{pmatrix} \wedge t'(\theta)}^{i\omega-1} \right) \xrightarrow{\text{正交切丛}} \langle T_{t'(\frac{\theta}{2} + nk\pi)}^{\partial M_{\Omega}^s}, T_{t'(\frac{\theta}{2} + nk\pi)}^{\partial M_{\Omega}^s} \rangle_{C_{ij}}^{\uparrow \downarrow}, \text{ and } \Omega^+ \rightsquigarrow \omega^{i\omega}, \Omega^- \rightsquigarrow \omega^{i\omega-1} \\
& T_{P_H}^{\omega} \left(\partial M_{\Omega}^s (C_{ij}^{\uparrow \downarrow})_{t'(\frac{\theta}{2} + nk\pi)} \otimes \partial M_{\Omega}^s (C_{ij}^{\uparrow \downarrow})_{t'(\frac{\theta}{2} + nk\pi)} \right), \text{ and } \Omega^- \rightsquigarrow \omega^{i\omega-1}, \Omega^+ \rightsquigarrow \omega^{i\omega}; \omega^{i\omega-1} \rightsquigarrow \omega^{s-}, \omega^{i\omega} \rightsquigarrow \omega^{s+}, \text{ if } s^- \\
& < \omega - 1, s^+ < \omega
\end{aligned}$$

$S_{\partial M}^{i\omega, i\omega-1} \sim {}^s \Omega^+ / {}^s \Omega^-, \rightsquigarrow {}_{i\omega} S_{\partial M}^{i\omega, i\omega-1} \sim {}^s \Omega^+ / {}^s \Omega^-, \text{ and } \omega \text{ 为超曲面的时间角速度}$

$i \cdot {}^s \Omega^+ / {}^s \Omega^-$ 为转过 ω 个超曲面的时间角速度后，总能找到其对偶密钥群势生成序列的存在性。而高维空间超曲面在时间 $t'(\theta) \rightsquigarrow \omega'(\theta)$ 时，获得

$$\begin{aligned}
& \rightarrow i\omega'_+(\theta) \cdot S_{\partial M}({}^s \Omega^+ / {}^s \Omega^-) \\
& i \cdot t'_{\omega(\pm)}(\theta) \cdot S_{\partial M}({}^s \Omega^+ / {}^s \Omega^-) \\
& \rightarrow i\omega'_-(\theta) \cdot S_{\partial M}({}^s \Omega^+ / {}^s \Omega^-)
\end{aligned}$$

$i \cdot t'_{\omega(\pm)}(\theta) \cdot S_{\partial M}({}^s \Omega^+ / {}^s \Omega^-) \sim i \cdot t'_{\omega(\pm)}(\theta) \cdot S_{\partial M}(\langle {}^s \Omega^+ \rangle \wedge S_{\partial M}({}^s \Omega^-))$, 在时间 t 高维切丛上角速度 ω 的高维超曲面、超对偶密钥群生成序列空间，具有有限对偶密钥群势生成序列的存在性

$$\begin{aligned}
& \langle T_{t'(\frac{\theta}{2} + nk\pi)}^{\partial M_{\Omega}^s}, T_{t'(\frac{\theta}{2} + nk\pi)}^{\partial M_{\Omega}^s} \rangle_{C_{ij}}^{\uparrow \downarrow} \rightsquigarrow \langle \frac{1}{t_1} \cdot {}^{\theta} \Omega_{T \begin{pmatrix} 0 & 1 \\ 1 & 0 \end{pmatrix} \wedge \rho_{\theta}(t)}^{i\omega}, \frac{1}{t_2} \cdot {}^{\theta} \Omega_{T \begin{pmatrix} 1 & 0 \\ 0 & 1 \end{pmatrix} \wedge \rho_{\theta}(t)}^{i\omega-1} \rangle \cdot a_{nn}^{\uparrow \downarrow} \\
& \langle \frac{1}{\theta_1} \cdot T_{t'(\frac{\theta}{2} + nk\pi)}^{+\Omega^{s-1}}, \frac{1}{\theta_2} \cdot T_{t'(\frac{\theta}{2} + nk\pi)}^{-\Omega^{s-1}} \rangle \cdot a_{mm}^{\uparrow \downarrow} \rightsquigarrow \langle \frac{1}{t_1} \cdot {}^{\theta} \Omega_{T \begin{pmatrix} 0 & 1 \\ 1 & 0 \end{pmatrix} \wedge \rho_{\theta}(t)}^{i\omega}, \frac{1}{t_2} \cdot {}^{\theta} \Omega_{T \begin{pmatrix} 1 & 0 \\ 0 & 1 \end{pmatrix} \wedge \rho_{\theta}(t)}^{i\omega-1} \rangle \cdot a_{nn}^{\uparrow \downarrow} \\
& \langle \frac{1}{\theta_1} \cdot T_{t'(\frac{\theta}{2} + nk\pi)}^{\Omega^{i\omega-}}, \frac{1}{\theta_2} \cdot T_{t'(\frac{\theta}{2} + nk\pi)}^{\Omega^{i\omega-1-}} \rangle \cdot a_{mm}^{\uparrow \downarrow} \rightsquigarrow \langle \frac{1}{t_1} \cdot {}^{\theta} \Omega_{T \begin{pmatrix} 0 & 1 \\ 1 & 0 \end{pmatrix} \wedge \rho_{\theta}(t)}^{i\omega}, \frac{1}{t_2} \cdot {}^{\theta} \Omega_{T \begin{pmatrix} 1 & 0 \\ 0 & 1 \end{pmatrix} \wedge \rho_{\theta}(t)}^{i\omega-1} \rangle \cdot a_{nn}^{\uparrow \downarrow} \\
& T \begin{pmatrix} 0 & 1 \\ 1 & 0 \end{pmatrix} \times \rho_{\theta}(t) \rightsquigarrow T \begin{pmatrix} 0 & 1 \\ 1 & 0 \end{pmatrix} \wedge \theta_{\frac{\pi}{2} + nk\pi}^{\pi}, T \begin{pmatrix} 0 & 1 \\ 1 & 0 \end{pmatrix} \times \rho_{\theta}(t_1) \rightsquigarrow T \begin{pmatrix} 0 & 1 \\ 1 & 0 \end{pmatrix} \wedge \theta_{\frac{\pi}{2} + nk\pi}^{\pi}
\end{aligned}$$

$$\langle \frac{1}{\theta_1} \cdot T_{\theta \begin{vmatrix} 0 & 1 \\ 1 & 0 \end{vmatrix}_t^{\frac{\pi}{2}+nk\pi}} \Omega^{i\omega}, \frac{1}{\theta_2} \cdot T_{\theta \begin{vmatrix} 1 & 0 \\ 0 & 1 \end{vmatrix}_t^{\frac{\pi}{2}+nk\pi}} \Omega^{i\omega-1} \rangle \cdot a_{mm}^{\uparrow\downarrow} \rightsquigarrow \langle \frac{1}{t_1} \cdot \Omega_{T \begin{pmatrix} 0 & 1 \\ 1 & 0 \end{pmatrix} \wedge \rho_{\theta}(t)}^{i\omega}, \frac{1}{t_2} \cdot \Omega_{T \begin{pmatrix} 1 & 0 \\ 0 & 1 \end{pmatrix} \wedge \rho_{\theta}(t)}^{i\omega-1} \rangle \cdot a_{nn}^{\uparrow\downarrow}$$

. 上式 $\theta \begin{vmatrix} 0 & 1 \\ 1 & 0 \end{vmatrix}_t^{\frac{\pi}{2}+nk\pi}, \theta \begin{vmatrix} 1 & 0 \\ 0 & 1 \end{vmatrix}_t^{\frac{\pi}{2}+nk\pi}$ 的 $\theta \rightsquigarrow \frac{\pi}{2} + nk\pi$ 就是正交矢量分布形态

$$\langle \frac{1}{\beta_1} \cdot T_{\beta \begin{vmatrix} 0 & 1 \\ 1 & 0 \end{vmatrix}_t^{\frac{\pi}{2}+nk\pi}} \Omega^{i\omega}, \frac{1}{\beta_2} \cdot T_{\beta \begin{vmatrix} 1 & 0 \\ 0 & 1 \end{vmatrix}_t^{\frac{\pi}{2}+nk\pi}} \Omega^{i\omega-1} \rangle \cdot a_{mm}^{\uparrow\downarrow} \rightsquigarrow \langle \frac{1}{t_1} \cdot \Omega_{T \begin{pmatrix} 0 & 1 \\ 1 & 0 \end{pmatrix} \wedge \rho_{\beta}(t)}^{i\omega}, \frac{1}{t_2} \cdot \Omega_{T \begin{pmatrix} 1 & 0 \\ 0 & 1 \end{pmatrix} \wedge \rho_{\beta}(t)}^{i\omega-1} \rangle \cdot a_{nn}^{\uparrow\downarrow}$$

$$\langle \langle \theta, \beta \rangle T_{\theta \wedge \beta \begin{vmatrix} 0 & 1 \\ 1 & 0 \end{vmatrix}_t^{\frac{\pi}{2}+nk\pi}} \Omega^{i\omega}, \langle \theta, \beta \rangle T_{\theta \wedge \beta \begin{vmatrix} 1 & 0 \\ 0 & 1 \end{vmatrix}_t^{\frac{\pi}{2}+nk\pi}} \Omega^{i\omega-1} \rangle \cdot a_{mm}^{\uparrow\downarrow} \rightsquigarrow \langle \langle \theta, \beta \rangle \Omega_{T^2 \begin{pmatrix} 0 & 1 \\ 1 & 0 \end{pmatrix} \wedge \rho_{\langle \theta, \beta \rangle}(t)}^{i\omega}, \langle \theta, \beta \rangle \Omega_{T^2 \begin{pmatrix} 1 & 0 \\ 0 & 1 \end{pmatrix} \wedge \rho_{\langle \theta, \beta \rangle}(t)}^{i\omega-1} \rangle \cdot a_{nn}^{\uparrow\downarrow}$$

$$\langle \langle \theta, \beta \rangle T_{\theta \wedge \beta \begin{vmatrix} 0 & 1 \\ 1 & 0 \end{vmatrix}_t^{\frac{\pi}{2}+nk\pi}} \Omega^{i\omega}, \langle \theta, \beta \rangle T_{\theta \wedge \beta \begin{vmatrix} 1 & 0 \\ 0 & 1 \end{vmatrix}_t^{\frac{\pi}{2}+nk\pi}} \Omega^{i\omega-1} \rangle \cdot a_{mm}^{\uparrow\downarrow} \rightsquigarrow \langle T^{-1} \begin{pmatrix} 0 & 1 \\ 1 & 0 \end{pmatrix} \cdot \sum_{s=3}^m \rho_{\theta}^s \cdot \frac{\theta_{\rho}(t)^{s-1}}{2}, T \begin{pmatrix} 1 & 0 \\ 0 & 1 \end{pmatrix} \cdot \sum_{i=3}^m \rho_{\beta}^i \cdot \frac{\beta_{\rho}(t)^{i-1}}{2} \rangle_{\langle i\omega, i\omega-1 \rangle} \cdot a_{nn}^{\uparrow\downarrow}, \text{变换公式}$$

$$\langle \langle \theta, \beta \rangle T_{\theta \wedge \beta \begin{vmatrix} 0 & 1 \\ 1 & 0 \end{vmatrix}_t^{\frac{\pi}{2}+nk\pi}} \Omega^{i\omega}, \langle \theta, \beta \rangle T_{\theta \wedge \beta \begin{vmatrix} 1 & 0 \\ 0 & 1 \end{vmatrix}_t^{\frac{\pi}{2}+nk\pi}} \Omega^{i\omega-1} \rangle \cdot a_{nn}^{\uparrow\downarrow} \rightsquigarrow \langle \langle \theta, \beta \rangle \Omega_{T^2 \begin{pmatrix} 0 & 1 \\ 1 & 0 \end{pmatrix} \wedge \rho_{\langle \theta, \beta \rangle}(t)}^{i\omega}, \langle \theta, \beta \rangle \Omega_{T^2 \begin{pmatrix} 1 & 0 \\ 0 & 1 \end{pmatrix} \wedge \rho_{\langle \theta, \beta \rangle}(t)}^{i\omega-1} \rangle \cdot a_{mm}^{\uparrow\downarrow}, \text{分析此公式}$$

$$T^2 \begin{vmatrix} 0 & 1 \\ 1 & 0 \end{vmatrix} \wedge \rho_{\langle \theta, \beta \rangle}(t) \rightsquigarrow \theta \wedge \beta \begin{vmatrix} 0 & 1 \\ 1 & 0 \end{vmatrix}_t^{\frac{\pi}{2}+nk\pi}, T^2 \begin{vmatrix} 1 & 0 \\ 0 & 1 \end{vmatrix} \wedge \rho_{\langle \theta, \beta \rangle}(t) \rightsquigarrow \theta \wedge \beta \begin{vmatrix} 1 & 0 \\ 0 & 1 \end{vmatrix}_t^{\frac{\pi}{2}+nk\pi}$$

$$\langle \langle \theta, \beta \rangle \Omega_{\theta \wedge \beta \begin{vmatrix} 0 & 1 \\ 1 & 0 \end{vmatrix}_t^{\frac{\pi}{2}+nk\pi}}^{i\omega}, \langle \theta, \beta \rangle \Omega_{\theta \wedge \beta \begin{vmatrix} 1 & 0 \\ 0 & 1 \end{vmatrix}_t^{\frac{\pi}{2}+nk\pi}}^{i\omega-1} \rangle \cdot a_{nn}^{\uparrow\downarrow} \rightsquigarrow \langle T^{-1} \begin{vmatrix} 0 & 1 \\ 1 & 0 \end{vmatrix} \cdot \sum_{s=3}^m \rho_{\theta}^s \cdot \frac{\theta_{\rho}(t)^{s-1}}{2}, T \begin{vmatrix} 1 & 0 \\ 0 & 1 \end{vmatrix} \cdot \sum_{i=3}^m \rho_{\beta}^i \cdot \frac{\beta_{\rho}(t)^{i-1}}{2} \rangle_{\langle i\omega, i\omega-1 \rangle} \cdot a_{mm}^{\uparrow\downarrow}$$

. 上式中有限对偶聚核势密钥群生成序列, 即高、低维凸核群切丛分布结构形态; 有限对偶聚核势生成序列

$$PASS_G : \langle \langle \theta, \beta \rangle \Omega_{\theta \wedge \beta \begin{vmatrix} 0 & 1 \\ 1 & 0 \end{vmatrix}_t^{\frac{\pi}{2}+nk\pi}}^{i\omega}, \langle \theta, \beta \rangle \Omega_{\theta \wedge \beta \begin{vmatrix} 1 & 0 \\ 0 & 1 \end{vmatrix}_t^{\frac{\pi}{2}+nk\pi}}^{i\omega-1} \rangle \cdot a_{nn}^{\uparrow\downarrow} \subset \langle T^{-1} \begin{vmatrix} 0 & 1 \\ 1 & 0 \end{vmatrix} \cdot \sum_{s=3}^m \rho_{\theta}^s \cdot \frac{\theta_{\rho}(t)^{s-1}}{2}, T \begin{vmatrix} 1 & 0 \\ 0 & 1 \end{vmatrix} \cdot \sum_{i=3}^m \rho_{\beta}^i \cdot \frac{\beta_{\rho}(t)^{i-1}}{2} \rangle_{\langle i\omega, i\omega-1 \rangle} \cdot a_{mm}^{\uparrow\downarrow}$$

有限对偶聚核势能量生成序列分布情况

. 解析入门埋在信息中, 而且在更高维度上运行; 记忆解析需要高速 $\omega^s(\lambda^i)$, 且为线性的。

$$\text{记忆解析: } I_{pass}^{s+1}(\lambda_*^i)_{\omega} : \left[{}^+\Omega_{Q_E}^{s+1}(\lambda^i)_{\omega} \vee {}^-\Omega_{Q_E}^{s+1}(\lambda_*^i)_{\omega} \right]_{\rho_{\theta}(t')}^{S_k^{-1}} \wedge \left[{}^+\Omega_{Q_E}^{s+1}(\lambda^i)_{\omega} \vee {}^-\Omega_{Q_E}^{s+1}(\lambda_*^i)_{\omega} \right]_{\rho_{\beta}(t')}^{S_k^{-1}}$$

$$PASS_G : \langle \langle \theta, \beta \rangle \Omega_{\theta \wedge \beta \begin{vmatrix} 0 & 1 \\ 1 & 0 \end{vmatrix}_t^{\frac{\pi}{2}+nk\pi}}^{i\omega}, \langle \theta, \beta \rangle \Omega_{\theta \wedge \beta \begin{vmatrix} 1 & 0 \\ 0 & 1 \end{vmatrix}_t^{\frac{\pi}{2}+nk\pi}}^{i\omega-1} \rangle \cdot a_{nn}^{\uparrow\downarrow}$$

$$\left[\langle \theta, \beta \rangle \Omega_{Q_{E \wedge \rho(\theta, \beta)}(t')}^{i\omega}, \langle \theta, \beta \rangle \Omega_{Q_{E \wedge \rho(\theta, \beta)}(t')}^{i\omega-1} \right]_{S_k^{-1}} \rightsquigarrow \langle \langle \theta, \beta \rangle \Omega_{\theta \wedge \beta \begin{vmatrix} 0 & 1 \\ 1 & 0 \end{vmatrix}_t^{\frac{\pi}{2}+nk\pi}}^{i\omega}, \langle \theta, \beta \rangle \Omega_{\theta \wedge \beta \begin{vmatrix} 1 & 0 \\ 0 & 1 \end{vmatrix}_t^{\frac{\pi}{2}+nk\pi}}^{i\omega-1} \rangle \cdot a_{mm}^{\uparrow\downarrow}, \text{ and } Q_E^2(S_k^{-1}) \sim \theta \wedge \beta \begin{vmatrix} 0 & 1 \\ 1 & 0 \end{vmatrix}_t^{\frac{\pi}{2}+nk\pi}, Q_{E_*}^2(S_k^{-1}) \sim \theta \wedge \beta \begin{vmatrix} 0 & 1 \\ 1 & 0 \end{vmatrix}_t^{\frac{\pi}{2}+nk\pi}, \therefore$$

$$\theta \wedge \beta \left| \begin{smallmatrix} 1 & 0 \\ 0 & 1 \end{smallmatrix} \right|_t^{\frac{\pi}{2}+nk\pi} \wedge \rho(\theta, \beta)(t') \rightsquigarrow \langle \theta \wedge \beta \rangle^2 \left| \begin{smallmatrix} 1 & 0 \\ 0 & 1 \end{smallmatrix} \right|_t^{\frac{\pi}{2}+nk\pi}$$

$$\theta \wedge \beta \left| \begin{smallmatrix} 0 & 1 \\ 1 & 0 \end{smallmatrix} \right|_t^{\frac{\pi}{2}+nk\pi} \wedge \rho(\theta, \beta)(t') \rightsquigarrow \langle \theta \wedge \beta \rangle^2 \left| \begin{smallmatrix} 0 & 1 \\ 1 & 0 \end{smallmatrix} \right|_t^{\frac{\pi}{2}+nk\pi}, \quad \therefore$$

$$\left[\langle \theta, \beta \rangle \Omega_{Q_{E \wedge \rho}^2(\theta, \beta)(t')}^{i\omega}, \langle \theta, \beta \rangle \Omega_{Q_{E \wedge \rho}^2(\theta, \beta)(t')}^{i\omega-1} \right]_{S_k^{-1}} \rightsquigarrow \left[\langle \theta, \beta \rangle \Omega_{\langle \theta \wedge \beta \rangle^2 \left| \begin{smallmatrix} 1 & 0 \\ 0 & 1 \end{smallmatrix} \right|_t^{\frac{\pi}{2}+nk\pi}}^{i\omega}, \langle \theta, \beta \rangle \Omega_{\langle \theta \wedge \beta \rangle^2 \left| \begin{smallmatrix} 0 & 1 \\ 1 & 0 \end{smallmatrix} \right|_t^{\frac{\pi}{2}+nk\pi}}^{i\omega-1} \right]_{S_k^{-1}}, \quad \therefore$$

$$I_{pass}^{s+1}(\lambda_*^i)_\omega : \left[{}^+ \Omega_{Q_{E \wedge \rho}^2(\theta, \beta)(t')}^{s+1} \vee {}^- \Omega_{Q_{E \wedge \rho}^2(\theta, \beta)(t')}^{s+1} \right]_{S_k^{-1}}, \quad \text{if } I_{pass}^{s+1}(\lambda_*^i)_\omega \sim I_{pass}^{(i\omega, i\omega-1)} \lambda_*^i$$

$$I_{pass_G}^{(i\omega, i\omega-1)} : \left[\langle \theta, \beta \rangle \Omega_{\langle \theta \wedge \beta \rangle^2 \left| \begin{smallmatrix} 1 & 0 \\ 0 & 1 \end{smallmatrix} \right|_t^{\frac{\pi}{2}+nk\pi}}^{i\omega}, \langle \theta, \beta \rangle \Omega_{\langle \theta \wedge \beta \rangle^2 \left| \begin{smallmatrix} 0 & 1 \\ 1 & 0 \end{smallmatrix} \right|_t^{\frac{\pi}{2}+nk\pi}}^{i\omega-1} \right]_{S_k^{-1}}, \text{ and } Q_E^2(S_k^{-1}) \sim \langle \theta \wedge \beta \rangle \left| \begin{smallmatrix} 1 & 0 \\ 0 & 1 \end{smallmatrix} \right|_t^{\frac{\pi}{2}+nk\pi}, Q_{E_*}^2 \sim \langle \theta \wedge \beta \rangle \left| \begin{smallmatrix} 0 & 1 \\ 1 & 0 \end{smallmatrix} \right|_t^{\frac{\pi}{2}+nk\pi}$$

$$\text{if } I_{pass}^{s+1}(\lambda_*^i)_\omega \sim I_{pass_G}^{(i\omega, i\omega-1)} \text{ then}$$

$$\left[\langle \theta, \beta \rangle \Omega_{Q_{E \wedge \rho}^2(\theta, \beta)(t')}^{i\omega}, \langle \theta, \beta \rangle \Omega_{Q_{E \wedge \rho}^2(\theta, \beta)(t')}^{i\omega-1} \right]_{S_k^{-1}} \rightsquigarrow \left[\langle \theta, \beta \rangle \Omega_{\langle \theta \wedge \beta \rangle^2 \left| \begin{smallmatrix} 1 & 0 \\ 0 & 1 \end{smallmatrix} \right|_t^{\frac{\pi}{2}+nk\pi}}^{i\omega}, \langle \theta, \beta \rangle \Omega_{\langle \theta \wedge \beta \rangle^2 \left| \begin{smallmatrix} 0 & 1 \\ 1 & 0 \end{smallmatrix} \right|_t^{\frac{\pi}{2}+nk\pi}}^{i\omega-1} \right]_{S_k^{-1}}, \text{ and if } \langle *, * \rangle \rightsquigarrow \langle *, * \rangle \text{ then}$$

$$I_{pass}^{s+1}(\lambda_*^i \vee \lambda^i)_\omega : \left[\langle \theta, \beta \rangle \Omega_{\langle \theta \wedge \beta \rangle^2 \left| \begin{smallmatrix} 1 & 0 \\ 0 & 1 \end{smallmatrix} \right|_t^{\frac{\pi}{2}+nk\pi}}^{i\omega}, \langle \theta, \beta \rangle \Omega_{\langle \theta \wedge \beta \rangle^2 \left| \begin{smallmatrix} 0 & 1 \\ 1 & 0 \end{smallmatrix} \right|_t^{\frac{\pi}{2}+nk\pi}}^{i\omega-1} \right]_{S_k^{-1}}$$

. 有限对偶核势凸核高低维能量分布(参见上面图); 以 $\frac{\pi}{2}$ 为球切面边界。

$$\langle Q_{E \wedge \rho}^2(\theta, \beta)(t') \left| \begin{smallmatrix} 1 & 0 \\ 0 & 1 \end{smallmatrix} \right|_t^{\frac{\pi}{2}+nk\pi}, Q_{E_*}^2(\theta, \beta)(t') \left| \begin{smallmatrix} 0 & 1 \\ 1 & 0 \end{smallmatrix} \right|_t^{\frac{\pi}{2}+nk\pi} \rangle$$

. 这种对偶核势与类脑(脑)的神经元能量分布波动非常类似, 而且其传导路径一般存在两条, 并在高一维、低一维之间进行能量波动, 或者定义为

$$\langle Q_E^2 \left| \begin{smallmatrix} 1 & 0 \\ 0 & 1 \end{smallmatrix} \right|_t^{\frac{\pi}{2}+nk\pi}, Q_{E_*}^2 \left| \begin{smallmatrix} 0 & 1 \\ 1 & 0 \end{smallmatrix} \right|_t^{\frac{\pi}{2}+nk\pi} \rangle, \text{ 即 } \langle t \left(\begin{smallmatrix} 1 & 0 \\ 0 & 1 \end{smallmatrix} \right), t_* \left(\begin{smallmatrix} 1 & 0 \\ 0 & 1 \end{smallmatrix} \right) \rangle_{Q_E} \sim \langle 1, -1 \rangle_{Q_E} \text{ 这为能量势的形式, 即}$$

$$\langle -Q_E^2(\rho_{(\theta, \beta)}(t'))_t^{\frac{\pi}{2}+nk\pi}, +Q_{E_*}^2(\rho_{(\theta, \beta)}^*(t'))_t^{\frac{\pi}{2}+nk\pi} \rangle, \text{ 这种波动呈现重复波动、回波的结构形态。}$$

$$I_{pass}^{s+1}(\lambda_*^i \vee \lambda^i) : \left[\langle \theta, \beta \rangle \Omega_{-Q_E^2(\rho_{(\theta, \beta)}(t'))_t^{\frac{\pi}{2}+nk\pi}}^{i\omega} \vee \langle \theta, \beta \rangle \Omega_{+Q_{E_*}^2(\rho_{(\theta, \beta)}^*(t'))_t^{\frac{\pi}{2}+nk\pi}}^{i\omega-1} \right], \text{ 变换公式, 则有}$$

$$I_{pass}^{s+1}(\lambda_*^i \vee \lambda^i) : \left[\langle \theta, \beta \rangle \Omega_{Q_E^2(\rho_{(\theta, \beta)}(t'))_t^{\frac{\pi}{2}+nk\pi}}^{i\omega} \vee \langle \theta, \beta \rangle \Omega_{+Q_{E_*}^2(\rho_{(\theta, \beta)}^*(t'))_t^{\frac{\pi}{2}+nk\pi}}^{i\omega-1} \right]$$

. 从上面公式可知对偶核势密钥群生成序列存在 $\pm \frac{\pi}{2} + nk\pi$ 的扰动, 同时也存在正交切丛。

$$I_{pass}^{s+1}(\lambda_*^i \vee \lambda^i) \sim I_{pass_G}^{(i\omega, i\omega-1)}, \text{ 则对上式变换为}$$

$$I_{pass_G}^{\langle i\omega, i\omega-1 \rangle} \cdot \left[\begin{array}{c} \langle \theta, \beta \rangle \Omega^{i\omega} \\ Q_E^2(\rho_{\langle \theta, \beta \rangle}(t'))_t^{-\frac{\pi}{2}+nk\pi} \vee \langle \theta, \beta \rangle \Omega^{i\omega-1} \\ Q_E^2(\rho_{\langle \theta, \beta \rangle}^*(t'))_t^{+\frac{\pi}{2}+nk\pi} \end{array} \right]$$

上式携带对偶核势凸核密钥群生成序列在不同正交切空间较高、较低一维度的核势能(类神经元), 而可以认为是《RLLM 多模态可预测性思维增强收缩参数群、尺度新一代生成式人工智能重构类脑神经网络 R-KFDNN 与密钥群生成序列》。

$$\left[\begin{array}{c} \langle \theta, \beta \rangle \Omega^{i\omega} \\ Q_E^2(\rho_{\langle \theta, \beta \rangle}(t'))_t^{-\frac{\pi}{2}+nk\pi} \vee \langle \theta, \beta \rangle \Omega^{i\omega-1} \\ + Q_E^2(\rho_{\langle \theta, \beta \rangle}^*(t'))_t^{\frac{\pi}{2}+nk\pi} \end{array} \right]_{a_{nn}^{\uparrow\downarrow}} \rightsquigarrow \langle \theta, \beta \rangle \Omega^{i\omega} \theta \wedge \beta \Big|_1^0 \frac{1}{0!} \frac{\pi}{2} + nk\pi, \langle \theta, \beta \rangle \Omega^{i\omega-1} \theta \wedge \beta \Big|_0^1 \frac{1}{0!} \frac{\pi}{2} + nk\pi \rangle a_{mm}^{\uparrow\downarrow}$$

$$\langle \theta, \beta \rangle \Omega^{i\omega} \theta \wedge \beta \Big|_1^0 \frac{1}{0!} \frac{\pi}{2} + nk\pi, \langle \theta, \beta \rangle \Omega^{i\omega-1} \theta \wedge \beta \Big|_0^1 \frac{1}{0!} \frac{\pi}{2} + nk\pi \rangle a_{mm}^{\uparrow\downarrow} \subset T^{-1} \begin{pmatrix} 0 & 1 \\ 1 & 0 \end{pmatrix} \cdot \sum_{s=3}^m \rho_{\theta}^s \cdot \frac{\theta_{\rho(t)}^{s-1}}{2}, T \begin{pmatrix} 1 & 0 \\ 0 & 1 \end{pmatrix} \cdot \sum_{i=3}^m \rho_{\beta}^i \cdot \frac{\beta_{\rho(t)}^{i-1}}{2} \rangle_{\langle i\omega, i\omega-1 \rangle} \cdot a_{mm}^{\uparrow\downarrow}$$

$$\left[\begin{array}{c} \langle \theta, \beta \rangle \Omega^{i\omega} \\ Q_E^2(\rho_{\langle \theta, \beta \rangle}(t'))_t^{-\frac{\pi}{2}+nk\pi} \vee \langle \theta, \beta \rangle \Omega^{i\omega-1} \\ + Q_E^2(\rho_{\langle \theta, \beta \rangle}^*(t'))_t^{\frac{\pi}{2}+nk\pi} \end{array} \right]_{a_{nn}^{\uparrow\downarrow}} \xrightarrow{c} \langle T^{-1} \begin{pmatrix} 0 & 1 \\ 1 & 0 \end{pmatrix} \cdot \sum_{s=3}^m \rho_{\theta}^s \cdot \frac{\theta_{\rho(t)}^{s-1}}{2}, T \begin{pmatrix} 1 & 0 \\ 0 & 1 \end{pmatrix} \cdot \sum_{i=3}^m \rho_{\beta}^i \cdot \frac{\beta_{\rho(t)}^{i-1}}{2} \rangle_{\langle i\omega, i\omega-1 \rangle} \cdot a_{mm}^{\uparrow\downarrow}, \text{ and}$$

$$\left\{ \begin{array}{l} \left[T^{-1} \begin{pmatrix} 0 & 1 \\ 1 & 0 \end{pmatrix} \cdot \sum_{s=3}^m \rho_{\theta}^s \cdot \frac{\theta_{\rho(t)}^{s-1}}{2} \right]_{sin}^{i\omega} \leftarrow \langle \theta, \beta \rangle \Omega^{i\omega} Q_E^2(\rho_{\langle \theta, \beta \rangle}(t'))_t^{-\frac{\pi}{2}+nk\pi} \\ \left[T \begin{pmatrix} 1 & 0 \\ 0 & 1 \end{pmatrix} \cdot \sum_{s=3}^m \rho_{\beta}^s \cdot \frac{\beta_{\rho(t)}^{s-1}}{2} \right]_{cos}^{i\omega-1} \leftarrow \langle \theta, \beta \rangle \Omega^{i\omega} Q_E^2(\rho_{\langle \theta, \beta \rangle}^*(t'))_t^{+\frac{\pi}{2}+nk\pi} \end{array} \right\}, \quad \text{or}$$

$$\left\{ \begin{array}{l} \langle \theta, \beta \rangle \Omega^{i\omega} Q_E^2(\rho_{\langle \theta, \beta \rangle}(t'))_t^{-\frac{\pi}{2}+nk\pi} \subset \left[T^{-1} \begin{pmatrix} 0 & 1 \\ 1 & 0 \end{pmatrix} \cdot \sum_{s=3}^m \rho_{\theta}^s \cdot \frac{\theta_{\rho(t)}^{s-1}}{2} \right]_{sin}^{i\omega} \\ \langle \theta, \beta \rangle \Omega^{i\omega} Q_E^2(\rho_{\langle \theta, \beta \rangle}^*(t'))_t^{+\frac{\pi}{2}+nk\pi} \subset \left[T \begin{pmatrix} 1 & 0 \\ 0 & 1 \end{pmatrix} \cdot \sum_{s=3}^m \rho_{\beta}^s \cdot \frac{\beta_{\rho(t)}^{s-1}}{2} \right]_{cos}^{i\omega-1} \end{array} \right\}, \quad \text{and}$$

$$\left\{ \begin{array}{l} \langle \theta, \beta \rangle \Omega^{i\omega} Q_E^2(\rho_{\langle \theta, \beta \rangle}(t'))_t^{-\frac{\pi}{2}+nk\pi} \subset \left[T^{-1} \begin{pmatrix} 0 & 1 \\ 1 & 0 \end{pmatrix} \cdot \sum_{s=3}^m \rho_{\theta}^s \cdot \frac{\theta_{\rho(t)}^{s-1}}{2} \right]_{sin}^{i\omega} \\ \langle \theta, \beta \rangle \Omega^{i\omega-1} Q_E^2(\rho_{\langle \theta, \beta \rangle}^*(t'))_t^{+\frac{\pi}{2}+nk\pi} \subset \left[T \begin{pmatrix} 1 & 0 \\ 0 & 1 \end{pmatrix} \cdot \sum_{s=3}^m \rho_{\beta}^s \cdot \frac{\beta_{\rho(t)}^{s-1}}{2} \right]_{cos}^{i\omega-1} \end{array} \right\}$$

$$\langle e_*, e^{-1} \rangle \left[\sum_{s=3}^m \rho_{\theta}^s \cdot \frac{\theta_{\rho(t)}^{s-1}}{2} \right]_{sin}, \langle e_*^{-1}, e \rangle \left[\sum_{s=3}^m \rho_{\beta}^s \cdot \frac{\beta_{\rho(t)}^{s-1}}{2} \right]_{cos}$$

$$\left\{ \begin{array}{l} \langle \theta, \beta \rangle \Omega^{i\omega} Q_E^2(\rho_{\langle \theta, \beta \rangle}(t'))_t^{-\frac{\pi}{2}+nk\pi} \xrightarrow{c} \langle e_*, e^{-1} \rangle sin \left[\sum_{s=3}^m \rho_{\theta}^s \cdot \frac{\theta_{\rho(t)}^{s-1}}{2} \right] \\ \langle \theta, \beta \rangle \Omega^{i\omega-1} Q_E^2(\rho_{\langle \theta, \beta \rangle}^*(t'))_t^{+\frac{\pi}{2}+nk\pi} \xrightarrow{c} \langle e_*^{-1}, e \rangle cos \left[\sum_{s=3}^m \rho_{\beta}^s \cdot \frac{\beta_{\rho(t)}^{s-1}}{2} \right] \end{array} \right\}$$

上式表明两组切丛(正交)形成对偶核势凸核有限密钥群生成序列

$$\begin{aligned}
 & \langle \theta, \beta \rangle \Omega^{(i\omega, i\omega-1)}_{Q_E^2(\rho_{(\theta, \beta)}(t'))^{\pm \frac{\pi}{2} + nk\pi}} \rightsquigarrow \langle e, e^{-1} \rangle \left[\sin \left(\sum_{s=3}^m \rho_{\theta}^s \cdot \frac{\theta_{\rho(t)}^{s-1}}{2} \right)^{i\omega} + \cos \left(\sum_{s=3}^m \rho_{\beta}^s \cdot \frac{\beta_{\rho(t)}^{s-1}}{2} \right)^{i\omega-1} \right] \\
 & \langle \theta, \beta \rangle \Omega^{(i\omega, i\omega-1)}_{Q_E^2(\rho_{(\theta, \beta)}(t'))^{\pm \frac{\pi}{2} + nk\pi}} \cdot a_{nn}^{\uparrow\downarrow} \rightsquigarrow \left(\frac{1}{t_1} \cdot \sum_{s=3}^m \rho_{\theta}^s \cdot \frac{\theta_{\rho(t)}^{s-1}}{2}, \frac{1}{t_2} \cdot \sum_{s=3}^m \rho_{\beta}^s \cdot \frac{\beta_{\rho(t)}^{s-1}}{2} \right)_{\langle \sin, \cos \rangle}^{(i\omega, i\omega-1)} \cdot a_{mm}^{\uparrow\downarrow} \\
 & \langle e, e^{-1} \rangle \left[\sin \left(\sum_{s=3}^m \rho_{\theta}^s \cdot \frac{\theta_{\rho(t)}^{s-1}}{2} \right)^{i\omega} + \cos \left(\sum_{s=3}^m \rho_{\beta}^s \cdot \frac{\beta_{\rho(t)}^{s-1}}{2} \right)^{i\omega-1} \right] \rightsquigarrow \left(\frac{1}{t_1} \cdot \sum_{s=3}^m \rho_{\theta}^s \cdot \frac{\theta_{\rho(t)}^{s-1}}{2}, \frac{1}{t_2} \cdot \sum_{s=3}^m \rho_{\beta}^s \cdot \frac{\beta_{\rho(t)}^{s-1}}{2} \right)_{\langle \sin, \cos \rangle}^{(i\omega, i\omega-1)} \\
 & \langle e, e^{-1} \rangle \left[\sin \left(\sum_{s=3}^m \rho_{\theta}^s \cdot \frac{\theta_{\rho(t)}^{s-1}}{2} \right) + \cos \left(\sum_{s=3}^m \rho_{\beta}^s \cdot \frac{\beta_{\rho(t)}^{s-1}}{2} \right) \right]^{(i\omega, i\omega-1)} \cdot a_{nn}^{\uparrow\downarrow} \\
 & \rightsquigarrow \left(\sin \left(\frac{1}{t_1} \cdot \sum_{s=3}^m \rho_{\theta}^s \cdot \frac{\theta_{\rho(t)}^{s-1}}{2} \right), \cos \left(\frac{1}{t_2} \cdot \sum_{s=3}^m \rho_{\beta}^s \cdot \frac{\beta_{\rho(t)}^{s-1}}{2} \right) \right)_{\langle \sin, \cos \rangle}^{(i\omega, i\omega-1)} \cdot a_{mm}^{\uparrow\downarrow} \quad (11) \\
 & \langle \theta, \beta \rangle \Omega^{(i\omega, i\omega-1)}_{Q_E^2(\rho_{(\theta, \beta)}(t'))^{\pm \frac{\pi}{2} + nk\pi}} \cdot a_{nn}^{\uparrow\downarrow} \rightsquigarrow \left(\sin \left(\frac{1}{t_1} \cdot \sum_{s=3}^m \rho_{\theta}^s \cdot \frac{\theta_{\rho(t)}^{s-1}}{2} \right), \cos \left(\frac{1}{t_2} \cdot \sum_{s=3}^m \rho_{\beta}^s \cdot \frac{\beta_{\rho(t)}^{s-1}}{2} \right) \right)_{\langle \sin, \cos \rangle}^{(i\omega, i\omega-1)} \cdot a_{mm}^{\uparrow\downarrow}
 \end{aligned}$$

上式正交切丛对偶核势凸核有限密钥群生成序列的 3D 数模，也正确表达其实质性规律；若内核以最初级数展开已经可以反应正交切丛对偶核势，并呈现有限超球面中局部、不同维度凸核生成序列；而这种对偶核势凸核有限密钥群生成序列穿越特殊时间锥超曲面。

$$\left(\sin \left(\frac{1}{t_1} \cdot \sum_{s=3}^m \rho_{\theta}^s \cdot \frac{\theta_{\rho(t)}^{s-1}}{2} \right), \cos \left(\frac{1}{t_2} \cdot \sum_{s=3}^m \rho_{\beta}^s \cdot \frac{\beta_{\rho(t)}^{s-1}}{2} \right) \right)_{\langle \sin, \cos \rangle}^{(i\omega, i\omega-1)} \cdot a_{mm}^{\uparrow\downarrow}, \text{ and if } s = 3, \omega \leq 4$$

呈现对偶核势凸核大小明显的有限密钥群生成序列的 3D 数模；并以类时间锥的超球面分布。

$$\langle \theta, \beta \rangle \Omega^{(i\omega, i\omega-1)}_{Q_E^2(\rho_{(\theta, \beta)}(t'))^{\pm \frac{\pi}{2} + nk\pi}} \cdot a_{nn}^{\uparrow\downarrow} \rangle \text{ 凸核能量的类神经元，在 } \Omega^{(i\omega, i\omega-1)} \text{ 中有规律分布 } Q_E^2 \text{ 为凸核能量的对偶核势；}$$

$a_{nn}^{\uparrow\downarrow}(Q_E^2)$ 为有限密钥群生成序列。

切丛对偶关系具有从弱非线性至线性内核的形态

$$\begin{aligned}
 & P_{P_H(f \otimes F)}^{1,0} (M_s \langle a_{nn}^{t'(\theta)}, a_{nn}^{\uparrow\downarrow} \rangle) \xrightarrow{\text{对偶切丛}} P_{P_H(f \otimes F)}^{0,1} (M_s \langle a_{nn}^{t'(\theta)}, a_{nn}^{\uparrow\downarrow} \rangle) \\
 & P_{H(f \otimes F)}^{\partial M_{\Omega}^s} \left(\Omega_{T|_0}^{i\omega} \begin{pmatrix} 1 & 0 \\ 0 & 1 \end{pmatrix} \Big|_{\Lambda t'(\theta)} \otimes \Omega_{T|_0}^{i\omega} \begin{pmatrix} 1 & 0 \\ 0 & 1 \end{pmatrix} \Big|_{\Lambda t'(\theta)} \right) \xrightarrow{\text{正交切丛}} \langle T_{t'(\frac{\theta_{\pi}{2} + nk\pi})}^{\partial M_{\Omega}^{s+}}, T_{t'(\frac{\theta_{\pi}{2} + nk\pi})}^{\partial M_{\Omega}^{s-}} \rangle \cdot C_{ij}^{\uparrow\downarrow} \\
 & \langle T_{t'(\frac{\theta_{\pi}{2} + nk\pi})}^{\partial M_{\Omega}^{s+}}, T_{t'(\frac{\theta_{\pi}{2} + nk\pi})}^{\partial M_{\Omega}^{s-}} \rangle \cdot C_{ij}^{\uparrow\downarrow} \rightsquigarrow \left\langle \frac{1}{t_1} \cdot {}^{\theta} \Omega_{T(1 \ 0)}^{i\omega} \Big|_{\Lambda \rho_{\theta}(t)} \otimes \frac{1}{t_2} \cdot {}^{\theta} \Omega_{T(1 \ 0)}^{i\omega-1} \Big|_{\Lambda \rho_{\theta}(t)} \right\rangle \cdot a_{nn}^{\uparrow\downarrow} \\
 & \left\langle \frac{1}{t_1} \cdot {}^{\theta} \Omega_{T(1 \ 0)}^{i\omega} \Big|_{\Lambda P_H(f \otimes F)} \otimes \frac{1}{t_2} \cdot {}^{\theta} \Omega_{T(1 \ 0)}^{i\omega-1} \Big|_{\Lambda P_H(f \otimes F)} \right\rangle \cdot a_{nn}^{\uparrow\downarrow}, \text{ and if } P_{H(f \otimes F)} \sim \rho_{\theta}(t) \text{ then} \\
 & P_{H(f \otimes F)}^{\partial M_{\Omega}^s} \left(\Omega_{T|_0}^{i\omega} \begin{pmatrix} 1 & 0 \\ 0 & 1 \end{pmatrix} \Big|_{\Lambda t'(\theta)} \otimes \Omega_{T|_0}^{i\omega-1} \begin{pmatrix} 1 & 0 \\ 0 & 1 \end{pmatrix} \Big|_{\Lambda t'(\theta)} \right) \xrightarrow{\text{正交切丛}} \left\langle \frac{1}{t_1} \cdot {}^{\theta} \Omega_{T(1 \ 0)}^{i\omega} \Big|_{\Lambda P_H(f \otimes F)} \otimes \frac{1}{t_2} \cdot {}^{\theta} \Omega_{T(1 \ 0)}^{i\omega-1} \Big|_{\Lambda P_H(f \otimes F)} \right\rangle \cdot a_{nn}^{\uparrow\downarrow}, \text{ 变换公式，则有}
 \end{aligned}$$

$P_{H(f \otimes F)}^{\partial M_{\Omega}^S} \left(\Omega_{T|1}^{i\omega} \begin{smallmatrix} 0 & 1 \\ 1 & 0 \end{smallmatrix} |_{\Lambda t' \langle \theta, \beta \rangle} \otimes \Omega_{T|0}^{i\omega-1} \begin{smallmatrix} 1 & 0 \\ 0 & 1 \end{smallmatrix} |_{\Lambda t' \langle \theta, \beta \rangle} \right) \xrightarrow{\text{正交切丛}} \left\langle \frac{1}{t_1} \cdot \langle \theta, \beta \rangle \Omega_{T \begin{smallmatrix} 0 & 1 \\ 1 & 0 \end{smallmatrix}}^{i\omega} \otimes \frac{1}{t_2} \cdot \langle \theta, \beta \rangle \Omega_{T \begin{smallmatrix} 1 & 0 \\ 0 & 1 \end{smallmatrix}}^{i\omega-1} \right\rangle \cdot a_{nn}^{\uparrow \downarrow}, \text{ and}$
 if $\rho'(t_{\langle \theta, \beta \rangle}) \sim t' \langle \theta, \beta \rangle$, 则上式为

$P_{H(f \otimes F)}^{\partial M_{\Omega}^S} \left(\Omega_{T|1}^{i\omega} \begin{smallmatrix} 0 & 1 \\ 1 & 0 \end{smallmatrix} |_{\Lambda \rho'(t_{\langle \theta, \beta \rangle})} \otimes \Omega_{T|0}^{i\omega-1} \begin{smallmatrix} 1 & 0 \\ 0 & 1 \end{smallmatrix} |_{\Lambda \rho'(t_{\langle \theta, \beta \rangle})} \right) \xrightarrow{\text{正交切丛}} \left\langle \frac{1}{t_1} \cdot \langle \theta, \beta \rangle \Omega_{T \begin{smallmatrix} 0 & 1 \\ 1 & 0 \end{smallmatrix}}^{i\omega} \otimes \frac{1}{t_2} \cdot \langle \theta, \beta \rangle \Omega_{T \begin{smallmatrix} 1 & 0 \\ 0 & 1 \end{smallmatrix}}^{i\omega-1} \right\rangle \cdot a_{nn}^{\uparrow \downarrow}, \text{ and}$
 if $P_{H(f \otimes F)} \sim \rho_{\theta}(t)$

$$\langle \langle \theta, \beta \rangle \Omega_{Q_E^2(\rho_{\langle \theta, \beta \rangle}(t'))_t}^{i\omega, i\omega-1} \cdot a_{nn}^{\uparrow \downarrow} \rangle \sim P_{H(f \otimes F)}^{\partial M_{\Omega}^S} \left(\Omega_{T|1}^{i\omega} \begin{smallmatrix} 0 & 1 \\ 1 & 0 \end{smallmatrix} |_{\Lambda \rho'(t_{\langle \theta, \beta \rangle})} \otimes \Omega_{T|0}^{i\omega-1} \begin{smallmatrix} 1 & 0 \\ 0 & 1 \end{smallmatrix} |_{\Lambda \rho'(t_{\langle \theta, \beta \rangle})} \right)$$

若 $P_{H(f \otimes F)}$ 调和映照稳定、平坦时，上式可以改写为

$P_{H(f \otimes F)}^{\partial M_{\Omega}^S} \left(\langle \langle \theta, \beta \rangle \Omega_{Q_E^2(\rho_{\langle \theta, \beta \rangle}(t'))_t}^{i\omega, i\omega-1} \cdot a_{nn}^{\uparrow \downarrow} \rangle \xrightarrow{\text{正交切丛}} \left\langle \frac{1}{t_1} \cdot \langle \theta, \beta \rangle \Omega_{T \begin{smallmatrix} 0 & 1 \\ 1 & 0 \end{smallmatrix}}^{i\omega} \otimes \frac{1}{t_2} \cdot \langle \theta, \beta \rangle \Omega_{T \begin{smallmatrix} 1 & 0 \\ 0 & 1 \end{smallmatrix}}^{i\omega-1} \right\rangle \cdot a_{nn}^{\uparrow \downarrow}, \text{ and}$
 if $P_{H(f \otimes F)} \sim \rho_{\theta}(t)$

$$P_{H(f \otimes F)}^{\partial M_{\Omega}^S} \left(\langle \langle \theta, \beta \rangle \Omega_{Q_E^2(\rho_{\langle \theta, \beta \rangle}(t'))_t}^{i\omega, i\omega-1} \cdot a_{nn}^{\uparrow \downarrow} \rangle \right) \rightsquigarrow \left\langle \sin \left(\frac{1}{t_1} \cdot \sum_{s=3}^m \rho_{\theta}^s \cdot \frac{\theta_{\rho(t)}^{s-1}}{2} \right), \cos \left(\frac{1}{t_2} \cdot \sum_{s=3}^m \rho_{\beta}^s \cdot \frac{\beta_{\rho_*(t)}^{s-1}}{2} \right) \right\rangle^{i\omega, i\omega-1} \wedge \left\langle \sin \left(\frac{1}{t_3} \cdot \sum_{s=3}^m \rho_{\theta}^s \cdot \frac{\theta_{\rho(t)}^{s-1}}{2} \right), \cos \left(\frac{1}{t_4} \cdot \sum_{s=3}^m \rho_{\beta}^s \cdot \frac{\beta_{\rho_*(t)}^{s-1}}{2} \right) \right\rangle^{i\omega, i\omega-1} \cdot a_{mm}^{\uparrow \downarrow}, \text{ and } t_1 \sim t_3, t_2 \sim t_4, \text{ then}$$

$$P_{H(f \otimes F)}^{\partial M_{\Omega}^S} \left(\langle \langle \theta, \beta \rangle \Omega_{Q_E^2(\rho_{\langle \theta, \beta \rangle}(t'))_t}^{i\omega, i\omega-1} \cdot a_{nn}^{\uparrow \downarrow} \rangle \right) \rightsquigarrow \left\langle \sin^2 \left(\frac{1}{T_1} \cdot \sum_{s=3}^m \rho_{\theta}^s \cdot \frac{\theta_{\rho(t)}^{s-1}}{2} \right), \cos^2 \left(\frac{1}{T_2} \cdot \sum_{s=3}^m \rho_{\beta}^s \cdot \frac{\beta_{\rho_*(t)}^{s-1}}{2} \right) \right\rangle^{i\omega, i\omega-1} \cdot a_{mm}^{\uparrow \downarrow}$$

. 将上式次内核心三角函数内核的平方推向 $2n$ 维，则上式化简为

$$P_{H(f \otimes F)}^{\partial M_{\Omega}^S} \left(\langle \langle \theta, \beta \rangle \Omega_{Q_E^2(\rho_{\langle \theta, \beta \rangle}(t'))_t}^{i\omega, i\omega-1} \cdot a_{nn}^{\uparrow \downarrow} \rangle \right) \rightsquigarrow \left\langle \sin^{2n} \left(\frac{1}{T_1} \cdot \sum_{s=3}^m \rho_{\theta}^s \cdot \frac{\theta_{\rho(t)}^{s-1}}{2} \right), \cos^{2n} \left(\frac{1}{T_2} \cdot \sum_{s=3}^m \rho_{\beta}^s \cdot \frac{\beta_{\rho_*(t)}^{s-1}}{2} \right) \right\rangle^{i\omega, i\omega-1} \cdot a_{mm}^{\uparrow \downarrow} \quad (12)$$

上式为 $H_{(f \otimes F)}$ 调和映照稳定、平坦时，时间切点 t_i^{∇} ，其核势 $a_{ii\uparrow\downarrow}^{(kk)} \rightsquigarrow Q_E^{2n}(a_{nn}^{\uparrow \downarrow})$ 曲面相切、时间线法线向量相交，即 $\langle \frac{1}{T_1}, \frac{1}{T_2} \rangle \rightsquigarrow \langle e_1^{-1}, e_2^{-1} \rangle$, if $e_1 \times e_2 = 0$ 则上式的 $H_{(f \otimes F)}$ 调和映照的平映非线性生成序列势卷积势空间结构相关。

$$T_{H(f \otimes F)}^{0,1} \left(M_s \langle a_{nn}^{t'(\theta)}, a_{nn}^{\uparrow \downarrow} \rangle \right), \text{ if } \langle a_{nn}^{t'(\theta)}, a_{nn}^{\uparrow \downarrow} \rangle \rightsquigarrow \langle e_1 \perp e_2 \rangle, \text{ 即 } e_1 \times e_2 = 0$$

$$T_{H(f \otimes F)}^{1,0} \left(M_s \langle a_{mm}^{t'(\theta)}, a_{mm}^{\uparrow \downarrow} \rangle \right), \text{ if } \langle a_{mm}^{t'(\theta)}, a_{mm}^{\uparrow \downarrow} \rangle \rightsquigarrow \langle e_1 \perp e_2 \rangle, \text{ 即 } e_1 \times e_2 = 0$$

$$Q_E^{2n}(a_{nn}^{\uparrow \downarrow})_{t_i^{\nabla}} \rightsquigarrow \langle a_{nn}^{t'(\theta)}, a_{nn}^{\uparrow \downarrow} \rangle, \text{ and } Q_E^{2n}(a_{nn}^{\uparrow \downarrow})_{t_i^{\nabla}} \rightsquigarrow \langle e_1 \perp e_2 \rangle, \text{ 即 } e_1 \times e_2 = 0$$

所以时间线法线向量与时间切点 t_i^{∇} 的 $Q_E^{2n}(a_{nn}^{\uparrow \downarrow})_{t_i^{\nabla}}$ 曲面相切，形成跨域的生成序列周期 $a_{\omega=i2\pi}^{(nn)\uparrow \downarrow}$ 。所以《密

钥群生成序列到乔治·康托尔》为一部最新《新一代生成式 AI 密码学》的诞生。

若 $H_{(f \otimes F)}$ 调和映照稳定、平坦, $Q_E^{2n}(\rho_{(\theta, \beta)}(t')) \rightsquigarrow 1$, 降维 $2n$, 则有

$$\begin{cases} \left\langle \sin \left({}^{\perp}T^{-1} \begin{vmatrix} 0 & 1 \\ 1 & 0 \end{vmatrix} \cdot \sum_{s=3}^m \rho_{\theta}^s \cdot \frac{\theta_{\rho(t)}^{s-1}}{2} \right) - \cos \left({}^{\perp}T^{-1} \begin{vmatrix} 1 & 0 \\ 0 & 1 \end{vmatrix} \cdot \sum_{s=3}^m \rho_{\beta}^s \cdot \frac{\beta_{\rho_*(t)}^{s-1}}{2} \right) \right\rangle^{(i\omega, i\omega-1)} \cdot a_{nn}^{\uparrow\downarrow} \\ \left\langle \sin \left({}^{\perp}T^{-1} \begin{vmatrix} 0 & 1 \\ 1 & 0 \end{vmatrix} \cdot \sum_{s=3}^m \rho_{\theta}^s \cdot \frac{\theta_{\rho(t)}^{s-1}}{2} \right) + \cos \left({}^{\perp}T^{-1} \begin{vmatrix} 1 & 0 \\ 0 & 1 \end{vmatrix} \cdot \sum_{s=3}^m \rho_{\beta}^s \cdot \frac{\beta_{\rho_*(t)}^{s-1}}{2} \right) \right\rangle^{(i\omega, i\omega-1)} \cdot a_{mm}^{\uparrow\downarrow} \end{cases}, \text{ and } \theta^s \rightsquigarrow \rho_{\theta}^s, \beta^s \rightsquigarrow \rho_{\beta}^s$$

$${}^{\perp}T^{-1} \begin{vmatrix} 0 & 1 \\ 1 & 0 \end{vmatrix} \times {}^{\perp}T^{-1} \begin{vmatrix} 1 & 0 \\ 0 & 1 \end{vmatrix} \neq 0, {}^{\perp}T^{-1} \begin{vmatrix} 1 & 0 \\ 0 & 1 \end{vmatrix} \times {}^{\perp}T^{-1} \begin{vmatrix} 0 & 1 \\ 1 & 0 \end{vmatrix} \neq 0$$

$$\langle \sin^2 \left({}^{\perp}T^{-1} \begin{vmatrix} 0 & 1 \\ 1 & 0 \end{vmatrix} \vee T \begin{vmatrix} 0 & 1 \\ 1 & 0 \end{vmatrix} \sum_{s=3}^m \rho_{\theta}^s \cdot \frac{\theta_{\rho(t)}^{s-1}}{2} \right) \wedge \cos^2 \left({}^{\perp}T^{-1} \begin{vmatrix} 1 & 0 \\ 0 & 1 \end{vmatrix} \vee T \begin{vmatrix} 1 & 0 \\ 0 & 1 \end{vmatrix} \sum_{s=3}^m \rho_{\beta}^s \cdot \frac{\beta_{\rho_*(t)}^{s-1}}{2} \right) \rangle^{(i\omega, i\omega-1)} \cdot a_{nn}^{\uparrow\downarrow}, \text{ and}$$

$$Q_E^2(a_{nn}^{\uparrow\downarrow})_{t_i^{\vee}} \rightsquigarrow Q_E^{2n}(a_{nn}^{\uparrow\downarrow})_{t_i^{\vee}}$$

$$\langle \sin^{2n} \left({}^{\perp}T^{-1} \begin{vmatrix} 0 & 1 \\ 1 & 0 \end{vmatrix} \cdot \sum_{s=3}^m \rho_{\theta}^s \cdot \frac{\theta_{\rho(t)}^{s-1}}{2} \right) \wedge \cos^{2n} \left({}^{\perp}T^{-1} \begin{vmatrix} 1 & 0 \\ 0 & 1 \end{vmatrix} \cdot \sum_{s=3}^m \rho_{\beta}^s \cdot \frac{\beta_{\rho_*(t)}^{s-1}}{2} \right) \rangle^{(i\omega, i\omega-1)} \cdot a_{nn}^{\uparrow\downarrow} \quad (68.*)$$

不断循环上式公式, 并形成有限群对偶密钥群核势凸核生成序列的高维、低维往复。而 " $\wedge$ " 非对偶时, " $\wedge$ " $\rightsquigarrow$ " $+$ "; 则上式可以改写为

$$\langle \sin^{2n} \left({}^{\perp}T^{-1} \begin{vmatrix} 0 & 1 \\ 1 & 0 \end{vmatrix} \cdot \sum_{s=3}^m \rho_{\theta}^s \cdot \frac{\theta_{\rho(t)}^{s-1}}{2} \right) + \cos^{2n} \left({}^{\perp}T^{-1} \begin{vmatrix} 1 & 0 \\ 0 & 1 \end{vmatrix} \cdot \sum_{s=3}^m \rho_{\beta}^s \cdot \frac{\beta_{\rho_*(t)}^{s-1}}{2} \right) \rangle^{(i\omega, i\omega-1)} \cdot a_{nn}^{\uparrow\downarrow}, \text{ 降维}$$

$$\langle \sin \left({}^{\perp}T^{-1} \begin{vmatrix} 0 & 1 \\ 1 & 0 \end{vmatrix} \cdot \sum_{s=3}^m \rho_{\theta}^s \cdot \frac{\theta_{\rho(t)}^{s-1}}{2} \right) + \cos \left({}^{\perp}T^{-1} \begin{vmatrix} 1 & 0 \\ 0 & 1 \end{vmatrix} \cdot \sum_{s=3}^m \rho_{\beta}^s \cdot \frac{\beta_{\rho_*(t)}^{s-1}}{2} \right) \rangle^{(i\omega, i\omega-1)} \cdot a_{nn}^{\uparrow\downarrow}$$

" $\wedge$ " $\rightsquigarrow$ " $+$ ", if ${}^{\perp}T^{-1} \rightsquigarrow T^{-1}$, 所以上式

$$\langle \sin \left(T^{-1} \begin{vmatrix} 0 & 1 \\ 1 & 0 \end{vmatrix} \cdot \sum_{s=3}^m \rho_{\theta}^s \cdot \frac{\theta_{\rho(t)}^{s-1}}{2} \right) + \cos \left(T^{-1} \begin{vmatrix} 1 & 0 \\ 0 & 1 \end{vmatrix} \cdot \sum_{s=3}^m \rho_{\beta}^s \cdot \frac{\beta_{\rho_*(t)}^{s-1}}{2} \right) \rangle^{(i\omega, i\omega-1)} \cdot a_{nn}^{\uparrow\downarrow}, \text{ and if } {}^{\perp}T^{-1} \rightsquigarrow T^{-1}, \wedge \rightsquigarrow +; \text{ 而}$$

上式也可以写为

$$\langle \sin \left(T^{-1} \begin{vmatrix} 0 & 1 \\ 1 & 0 \end{vmatrix} \cdot \sum_{s=3}^m \rho_{\theta}^s \cdot \frac{\theta_{\rho(t)}^{s-1}}{2} \right), \cos \left(T^{-1} \begin{vmatrix} 1 & 0 \\ 0 & 1 \end{vmatrix} \cdot \sum_{s=3}^m \rho_{\beta}^s \cdot \frac{\beta_{\rho_*(t)}^{s-1}}{2} \right) \rangle^{(i\omega, i\omega-1)} \cdot a_{nn}^{\uparrow\downarrow}, \text{ and if } \wedge \rightsquigarrow \langle, \rangle, \omega - 1, \omega = 1.5$$

$$\langle \sin^{2n} \left({}^{\perp}T^{-1} \begin{vmatrix} 0 & 1 \\ 1 & 0 \end{vmatrix} \cdot \sum_{s=3}^m \rho_{\theta}^s \cdot \frac{\theta_{\rho(t)}^{s-1}}{2} \right) \vee \cos^{2n} \left({}^{\perp}T^{-1} \begin{vmatrix} 1 & 0 \\ 0 & 1 \end{vmatrix} \cdot \sum_{s=3}^m \rho_{\beta}^s \cdot \frac{\beta_{\rho_*(t)}^{s-1}}{2} \right) \rangle^{(i\omega, i\omega-1)} \cdot a_{nn}^{\uparrow\downarrow}, \text{ and if } \vee \rightsquigarrow \wedge_1, \wedge_2, \dots, \wedge_n$$

$$, 2n \geq 6, \omega - 1, \omega \geq 10$$

所以, 上面两者在低维与高维之间切换, 形成了生成式人工智能的对偶密钥群核势凸核, 并随时间锥超切面旋转[塌陷], 在时间锥主轴附近忽隐忽现。而数模 3D 的 3 维图像也验证了这种理论正确性。

同时, 这也属于《新一代生成式人工智能密码学》的范畴。

$$\begin{aligned}
& \sin^{2n} \left({}^{\perp}T^{-1} \begin{vmatrix} 0 & 1 \\ 1 & 0 \end{vmatrix} \cdot \sum_{s=3}^m \rho_{\theta}^s \cdot \frac{\theta_{\rho(t)}^{s-1}}{2} \right) \rightsquigarrow \sin \left(T^{-1} \begin{vmatrix} 0 & 1 \\ 1 & 0 \end{vmatrix} \cdot \sum_{s=3}^m \rho_{\theta}^s \cdot \frac{\theta_{\rho(t)}^{s-1}}{2} \right), \text{ and if } {}^{\perp}T^{-1} \sim T^{-1} \\
& \left\{ \begin{aligned} & \sin \left({}^{\perp}T^{-1} \begin{vmatrix} 0 & 1 \\ 1 & 0 \end{vmatrix} \cdot \sum_{s=3}^m \rho_{\theta}^s \cdot \frac{\theta_{\rho(t)}^{s-1}}{2} \right) \rightsquigarrow \sqrt{{}^{2n} \sin \left(T^{-1} \begin{vmatrix} 0 & 1 \\ 1 & 0 \end{vmatrix} \cdot \sum_{s=3}^m \rho_{\theta}^s \cdot \frac{\theta_{\rho(t)}^{s-1}}{2} \right)} \\ & \cos \left({}^{\perp}T^{-1} \begin{vmatrix} 1 & 0 \\ 0 & 1 \end{vmatrix} \cdot \sum_{s=3}^m \rho_{*\beta}^s \cdot \frac{\beta_{\rho_*(t)}^{s-1}}{2} \right) \rightsquigarrow \sqrt{{}^{2n} \cos \left(T^{-1} \begin{vmatrix} 1 & 0 \\ 0 & 1 \end{vmatrix} \cdot \sum_{s=3}^m \rho_{*\beta}^s \cdot \frac{\beta_{\rho_*(t)}^{s-1}}{2} \right)} \end{aligned} \right\}, \text{ and if } 2n \rightsquigarrow 1 \\
& \left\{ \begin{aligned} & \sin \left({}^{\perp}T^{-1} \begin{vmatrix} 0 & 1 \\ 1 & 0 \end{vmatrix} \cdot \sum_{s=3}^m \rho_{\theta}^s \cdot \frac{\theta_{\rho(t)}^{s-1}}{2} \right) \rightsquigarrow \sin \left(T^{-1} \begin{vmatrix} 0 & 1 \\ 1 & 0 \end{vmatrix} \cdot \sum_{s=3}^m \rho_{\theta}^s \cdot \frac{\theta_{\rho(t)}^{s-1}}{2} \right) \\ & \cos \left({}^{\perp}T^{-1} \begin{vmatrix} 1 & 0 \\ 0 & 1 \end{vmatrix} \cdot \sum_{s=3}^m \rho_{*\beta}^s \cdot \frac{\beta_{\rho_*(t)}^{s-1}}{2} \right) \rightsquigarrow \cos \left(T^{-1} \begin{vmatrix} 1 & 0 \\ 0 & 1 \end{vmatrix} \cdot \sum_{s=3}^m \rho_{*\beta}^s \cdot \frac{\beta_{\rho_*(t)}^{s-1}}{2} \right) \end{aligned} \right\}, \text{ and if } {}^{\perp}T^{-1} \begin{vmatrix} 0 & 1 \\ 1 & 0 \end{vmatrix} \times T^{-1} \begin{vmatrix} 0 & 1 \\ 1 & 0 \end{vmatrix} \\
& \rightsquigarrow \langle e^{\perp} \times e \rangle^{-1}, {}^{\perp}T^{-1} \begin{vmatrix} 1 & 0 \\ 0 & 1 \end{vmatrix} \times T^{-1} \begin{vmatrix} 1 & 0 \\ 0 & 1 \end{vmatrix} \rightsquigarrow \langle e_*^{\perp} \times e_* \rangle^{-1}
\end{aligned}$$

所以生成式人工智能密码学维度析取的逻辑数学构件。

$$\left\| \sin \left({}^{\perp}T^{-1} \begin{vmatrix} 0 & 1 \\ 1 & 0 \end{vmatrix} \cdot \sum_{s=3}^m \rho_{\theta}^s \cdot \frac{\theta_{\rho(t)}^{s-1}}{2} \right) \right\| \simeq \sin \left(T^{-1} \begin{vmatrix} 0 & 1 \\ 1 & 0 \end{vmatrix} \cdot \sum_{s=3}^m \rho_{\theta}^s \cdot \frac{\theta_{\rho(t)}^{s-1}}{2} \right), \text{ and } {}^{\perp}T^{-1} \sim T^{-1}, \therefore$$

上式可以改写为

$$\begin{aligned}
& \left\| \sin \left(T^{-1} \begin{vmatrix} 1 & 0 \\ 0 & 1 \end{vmatrix} \cdot \sum_{s=3}^m \rho_{\theta}^s \cdot \frac{\theta_{\rho(t)}^{s-1}}{2} \right) \right\| \simeq \sin \left(T^{-1} \begin{vmatrix} 0 & 1 \\ 1 & 0 \end{vmatrix} \cdot \sum_{s=3}^m \rho_{\theta}^s \cdot \frac{\theta_{\rho(t)}^{s-1}}{2} \right), \text{ and } T^{-1} \begin{vmatrix} 1 & 0 \\ 0 & 1 \end{vmatrix} \sim T^{-1} \begin{vmatrix} 0 & 1 \\ 1 & 0 \end{vmatrix} \\
& \left\| \sin \left(T^{-1} \begin{vmatrix} 0 & 1 \\ 1 & 0 \end{vmatrix} \cdot \sum_{s=3}^m \rho_{\theta}^s \cdot \frac{\theta_{\rho(t)}^{s-1}}{2} \right) \right\| \simeq \sin \left(T^{-1} \begin{vmatrix} 1 & 0 \\ 0 & 1 \end{vmatrix} \cdot \sum_{s=3}^m \rho_{\theta}^s \cdot \frac{\theta_{\rho(t)}^{s-1}}{2} \right), \text{ and } T^{-1} \begin{vmatrix} 0 & 1 \\ 1 & 0 \end{vmatrix} \sim T^{-1} \begin{vmatrix} 1 & 0 \\ 0 & 1 \end{vmatrix}
\end{aligned}$$

所以上述内容推导过程，充分说明了是范函方程，则下面高维复变空间方程

$$\begin{aligned}
& \langle \sin^{2n} \left(\frac{1}{t_1} \cdot \sum_{s=3}^m \rho_{\theta}^s \cdot \frac{\theta_{\rho(t)}^{s-1}}{2} \right) \vee \cos^{2n} \left(\frac{1}{t_2} \cdot \sum_{s=3}^m \rho_{*\beta}^s \cdot \frac{\beta_{\rho_*(t)}^{s-1}}{2} \right) \rangle^{(i\omega, i\omega-1)} \cdot a_{nn}^{\uparrow \downarrow}, \text{ and } t_1, t_2 = \text{const. } s = 2, 2n \geq 6, \\
& \omega - 1, \omega \geq 10 \quad (13)
\end{aligned}$$

对偶密钥群去核势生成序列，时间锥主轴法向量旋转密钥群生成序列[调和映照、平坦]

$$\langle \sin \left(\frac{1}{t_1} \cdot \sum_{s=3}^m \rho_{\theta}^s \cdot \frac{\theta_{\rho(t)}^{s-1}}{2} \right) + \cos \left(\frac{1}{t_2} \cdot \sum_{s=3}^m \rho_{*\beta}^s \cdot \frac{\beta_{\rho_*(t)}^{s-1}}{2} \right) \rangle^{(i\omega, i\omega-1)} \cdot a_{nn}^{\uparrow \downarrow}, \text{ and } t_1, t_2 = \text{const. } s = 2, \omega - 1, \omega = 1.5 \quad (14)$$

对偶密钥群核势凸核生成序列，时间锥主轴切向量旋转密钥群生成序列[非调和映照、平坦]；而且上面两个函数都是范函。 θ^s 在 t_1 的控制下，可以收缩对偶密钥群核势凸核生成序列的数量和分布位置。而 β^s, t_2 也同样如此。 $\langle i\omega, i\omega - 1 \rangle, t_1, t_2$ 是非线性划分对偶密钥群核势凸核的范围和数量。所以形成非线性、超对称、对偶孪生密钥群；而对偶则具有密钥与密钥表，即

$$pass_{Key}^T : \sin\left(\frac{1}{t_1} \cdot \sum_{s=3}^m \rho_{\theta}^s \cdot \frac{\theta_{\rho(t)}^{s-1}}{2}\right), \quad pass_{Table}^{Key} : \sin^{2n}\left(\frac{1}{t_1} \cdot \sum_{s=3}^m \rho_{\theta}^s \cdot \frac{\theta_{\rho(t)}^{s-1}}{2}\right)$$

$$pass_{Word} : \cos\left(\frac{1}{t_2} \cdot \sum_{s=3}^m \rho_{\beta}^s \cdot \frac{\beta_{\rho(t)}^{s-1}}{2}\right), \quad pass_{Table}^{Word} : \cos^{2n}\left(\frac{1}{t_2} \cdot \sum_{s=3}^m \rho_{\beta}^s \cdot \frac{\beta_{\rho(t)}^{s-1}}{2}\right)$$

所以对偶密钥群、密码对应密码(密钥)表, 则有

$$pass_{Key}^T + pass_{Word} \xrightarrow{Q_k^{2n}} pass_{Table}^{Key} + pass_{Table}^{Word}$$

当前、后时间锥维度相同时, 其在范函结构值具有等价值; 而密钥+密码=核势[凸核], 密钥[码]表为对应核势[凸核]的超曲面[超时间锥的超曲面], 并呈现凸核的平坦性, 即范函之调和映照的平坦性分布。

密码群[表]的对偶密钥群核势凸核生成序列; 而密钥群[表]的对偶密钥群之高维密钥群时间锥[表]; 时间锥主轴切(法)向量旋转密钥群生成序列。

对偶密钥群_密码表生成序列:

$$\left\{ \begin{array}{l} \langle \cos\left(T^{-1} \begin{vmatrix} 1 & 0 \\ 0 & 1 \end{vmatrix} \cdot \sum_{s=3}^m \rho_{\beta}^s \cdot \frac{\beta_{\rho(t)}^{s-1}}{2}\right) \rangle^{(i\omega, i\omega-1)} \cdot a_{nm}^{\uparrow\downarrow}, \text{对偶于} \\ \langle \cos\left(T^{-1} \begin{vmatrix} 0 & 1 \\ 1 & 0 \end{vmatrix} \cdot \sum_{s=3}^m \rho_{\theta}^s \cdot \frac{\theta_{\rho(t)}^{s-1}}{2}\right) \rangle^{(i\omega, i\omega-1)} \cdot a_{mm}^{\uparrow\downarrow}, s=2, \omega, \omega-1=1.5 \end{array} \right.$$

对偶密钥群_高维密钥群时间锥_密钥表; 时间锥主轴切(法)向量旋转密钥群生成序列; 这种密钥表非核势凸核的容器。

$$\left\{ \begin{array}{l} \langle \cos^{2n}\left({}^{\perp}T^{-1} \begin{vmatrix} 1 & 0 \\ 0 & 1 \end{vmatrix} \cdot \sum_{s=3}^m \rho_{\beta}^s \cdot \frac{\beta_{\rho(t)}^{s-1}}{2}\right) \rangle^{(i\omega, i\omega-1)}, \text{对偶于} \\ \langle \cos^{2n}\left({}^{\perp}T^{-1} \begin{vmatrix} 0 & 1 \\ 1 & 0 \end{vmatrix} \cdot \sum_{s=3}^m \rho_{\theta}^s \cdot \frac{\theta_{\rho(t)}^{s-1}}{2}\right) \rangle^{(i\omega, i\omega-1)}, s=2, 2n \geq 6, \omega, \omega-1 \geq 10 \end{array} \right.$$

. 在高维密钥表容器中只要进行升、降维度来获得正确的密码表生成序列; 即 $\omega, \omega-1 \geq 10k, \omega, \omega-1 \Leftarrow 1.5, \text{and } 2n \geq 6 \text{ or } 2n \leq 2$

. 而对偶密钥群核势凸核生成序列, 定义密码[表]群; 其实类似类脑(脑)神经网络的类叠、交织、演化为凸核的类神经元, 即核势生成序列。而对偶密钥群的高维密钥群时间锥的高维密钥表容器, 它将对偶密钥群核势凸核[密码表]生成序列分布在高维容器中; 所以它将类似类脑(脑)灵感, 即为《新一代生成式人工智能密码学》; 其核心公式为:

A. 对偶密钥群核势凸核_密码表_生成序列:

$$\langle \cos\left(T^{-1} \begin{vmatrix} 1 & 0 \\ 0 & 1 \end{vmatrix} \cdot \sum_{s=3}^m \beta^s \cdot \frac{\beta_{\rho(t)}^{s-1}}{2}\right) \rangle^{(i\omega, i\omega-1)} \cdot a_{nm}^{\uparrow\downarrow}, \text{对偶于} \langle \cos\left(T^{-1} \begin{vmatrix} 0 & 1 \\ 1 & 0 \end{vmatrix} \cdot \sum_{s=3}^m \beta^s \cdot \frac{\beta_{\rho(t)}^{s-1}}{2}\right) \rangle^{(i\omega, i\omega-1)} \cdot a_{nm}^{\uparrow\downarrow}$$

B. 对偶密钥群_高维密钥群时间锥[高维密钥表]：

$$\langle \cos^{2n} \left({}^{\perp}T^{-1} \begin{vmatrix} 1 & 0 \\ 0 & 1 \end{vmatrix} \cdot \sum_{s=3}^m \rho_{* \beta}^s \cdot \frac{\beta_{\rho_*(t)}^{s-1}}{2} \right) \rangle^{(i\omega, i\omega-1)}, \text{对偶} \langle \cos^{2n} \left({}^{\perp}T^{-1} \begin{vmatrix} 1 & 0 \\ 1 & 0 \end{vmatrix} \cdot \sum_{s=3}^m \rho_{* \beta}^s \cdot \frac{\beta_{\rho_*(t)}^{s-1}}{2} \right) \rangle^{(i\omega, i\omega-1)}$$

同时单体公式也服从整体公式

$$A.01 \langle \sin \left(\frac{1}{t_1} \cdot \sum_{s=3}^m \theta^s \cdot \frac{\theta_{\rho(t)}^{s-1}}{2} \right) + \cos \left(\frac{1}{t_2} \cdot \sum_{s=3}^m \beta^s \cdot \frac{\beta_{\rho(t)}^{s-1}}{2} \right) \rangle^{(i\omega, i\omega-1)} \cdot a_{mm}^{\uparrow\downarrow}, \text{ and } s = 2, \omega - 1, \omega = 1.5$$

$$A.02 \langle \sin^{2n} \left({}^{\perp}T^{-1} \begin{vmatrix} 0 & 1 \\ 1 & 0 \end{vmatrix} \cdot \sum_{s=3}^m \rho_{\theta}^s \cdot \frac{\theta_{\rho(t)}^{s-1}}{2} \right) \vee \cos^{2n} \left({}^{\perp}T^{-1} \begin{vmatrix} 1 & 0 \\ 0 & 1 \end{vmatrix} \cdot \sum_{s=3}^m \rho_{* \beta}^s \cdot \frac{\beta_{\rho_*(t)}^{s-1}}{2} \right) \rangle^{(i\omega, i\omega-1)} \cdot a_{nm}^{\uparrow\downarrow}, \text{ 变换为}$$

$$\langle \sin^{2n} \left(\frac{1}{t_1} \cdot \sum_{s=3}^m \rho_{\theta}^s \cdot \frac{\theta_{\rho(t)}^{s-1}}{2} \right) \vee \cos^{2n} \left(\frac{1}{t_2} \cdot \sum_{s=3}^m \rho_{* \beta}^s \cdot \frac{\beta_{\rho_*(t)}^{s-1}}{2} \right) \rangle^{(i\omega, i\omega-1)} \cdot a_{nm}^{\uparrow\downarrow}, \text{ and } s = 2, 2n \geq 6, \omega - 1, \omega \geq 10$$

. 单体范函服从整体范函的对偶密钥群核势凸核密码表生成序列

$$B.01 \begin{cases} \langle \cos \left(T^{-1} \begin{vmatrix} 1 & 0 \\ 0 & 1 \end{vmatrix} \cdot \sum_{s=3}^m \beta^s \cdot \frac{\beta_{\rho(t)}^{s-1}}{2} \right) \rangle^{(i\omega, i\omega-1)} \cdot a_{nm}^{\uparrow\downarrow} \subset \langle \sin \left(\frac{1}{t_1} \cdot \sum_{s=3}^m \theta^s \cdot \frac{\theta_{\rho(t)}^{s-1}}{2} \right) + \cos \left(\frac{1}{t_2} \cdot \sum_{s=3}^m \beta^s \cdot \frac{\beta_{\rho(t)}^{s-1}}{2} \right) \rangle^{(i\omega, i\omega-1)} \cdot a_{nm}^{\uparrow\downarrow} \\ \langle \cos \left(T^{-1} \begin{vmatrix} 0 & 1 \\ 1 & 0 \end{vmatrix} \cdot \sum_{s=3}^m \beta^s \cdot \frac{\beta_{\rho(t)}^{s-1}}{2} \right) \rangle^{(i\omega, i\omega-1)} \cdot a_{nm}^{\uparrow\downarrow} \subset \langle \sin \left(\frac{1}{t_1} \cdot \sum_{s=3}^m \theta^s \cdot \frac{\theta_{\rho(t)}^{s-1}}{2} \right) + \cos \left(\frac{1}{t_2} \cdot \sum_{s=3}^m \beta^s \cdot \frac{\beta_{\rho(t)}^{s-1}}{2} \right) \rangle^{(i\omega, i\omega-1)} \cdot a_{mm}^{\uparrow\downarrow} \end{cases}$$

. 单体范函服从整体范函的对偶密钥群_高维密钥群时间锥的高维密钥表

$$B.02 \begin{cases} \langle \cos^{2n} \left({}^{\perp}T^{-1} \begin{vmatrix} 1 & 0 \\ 0 & 1 \end{vmatrix} \cdot \sum_{s=3}^m \rho_{* \beta}^s \cdot \frac{\beta_{\rho_*(t)}^{s-1}}{2} \right) \rangle^{(i\omega, i\omega-1)} \subset \langle \sin^{2n} \left(\frac{1}{t_1} \cdot \sum_{s=3}^m \rho_{\theta}^s \cdot \frac{\theta_{\rho(t)}^{s-1}}{2} \right) \vee \cos^{2n} \left(\frac{1}{t_2} \cdot \sum_{s=3}^m \rho_{* \beta}^s \cdot \frac{\beta_{\rho_*(t)}^{s-1}}{2} \right) \rangle^{(i\omega, i\omega-1)} \\ \langle \cos^{2n} \left({}^{\perp}T^{-1} \begin{vmatrix} 0 & 1 \\ 1 & 0 \end{vmatrix} \cdot \sum_{s=3}^m \rho_{* \beta}^s \cdot \frac{\beta_{\rho_*(t)}^{s-1}}{2} \right) \rangle^{(i\omega, i\omega-1)} \subset \langle \sin^{2n} \left(\frac{1}{t_1} \cdot \sum_{s=3}^m \rho_{\theta}^s \cdot \frac{\theta_{\rho(t)}^{s-1}}{2} \right) \vee \cos^{2n} \left(\frac{1}{t_2} \cdot \sum_{s=3}^m \rho_{* \beta}^s \cdot \frac{\beta_{\rho_*(t)}^{s-1}}{2} \right) \rangle^{(i\omega, i\omega-1)} \end{cases}$$

对偶密钥群去核势生成序列，时间锥主轴法向量旋转变密钥群生成序列，调和映照的平坦、降维 $2n$ ：

$$\langle \sin^{2n} \left({}^{\perp}T^{-1} \begin{vmatrix} 0 & 1 \\ 1 & 0 \end{vmatrix} \cdot \sum_{s=3}^m \rho_{\theta}^s \cdot \frac{\theta_{\rho(t)}^{s-1}}{2} \right) \vee \cos^{2n} \left({}^{\perp}T^{-1} \begin{vmatrix} 1 & 0 \\ 0 & 1 \end{vmatrix} \cdot \sum_{s=3}^m \rho_{* \beta}^s \cdot \frac{\beta_{\rho_*(t)}^{s-1}}{2} \right) \rangle^{(i\omega, i\omega-1)} \cdot a_{nm}^{\uparrow\downarrow} \\ , \text{ and } s = 2, 2n \geq 6, \omega - 1, \omega \geq 10 \quad (15)$$

2.2 携带密钥群生成序列 $\langle {}^{(\theta, \beta)} \Omega_{T^2}^{i\omega} \begin{vmatrix} 0 & 1 \\ 1 & 0 \end{vmatrix} \wedge \rho_{(\theta, \beta)}(t) \rangle, {}^{(\theta, \beta)} \Omega_{T^2}^{i\omega-1} \begin{vmatrix} 1 & 0 \\ 0 & 1 \end{vmatrix} \wedge \rho_{(\theta, \beta)}(t) \rangle$ 左右脑(类脑)内核，在更高维度幂函数

的高维度复变弦线丛势生成序列形成高维线圈；每片约化 $S_{\theta M}^{-1}$ 上密钥群的生成序列

2.2.1 高一维、低一维切丛核势[核势 $a_{ii\uparrow\downarrow}^{(kk)}$]曲面相切、时间线法线向量相交[的密钥群生成序列的对偶密钥群核势正交滑动模态。所以对偶密钥群核势生成序列位于时间锥主轴线上的超曲面，并随之动态、弱非线性旋转而产生密钥群核势[凸核]生成序列

$${}_{left}^+ \Omega(S_{\lambda(t, \theta)}^{-1}) \wedge {}_{right}^- \Omega(S_{\lambda(t, \theta)}^{-1}) \\ \rightsquigarrow \left[\sin \left(\sum_{i=2}^m \rho_{\theta}^i \cdot \frac{\theta_{\rho(t')}^i}{2} \wedge \sum_{j=2}^m \rho_{\beta}^j \cdot \frac{\beta_{\rho(t')}^j}{2} \right) \otimes \cos \left(\sum_{j=2}^p \rho_{* \theta}^j \cdot \frac{\theta_{\rho_*(t')}^j}{2} \wedge \sum_{i=2}^q \rho_{* \beta}^i \cdot \frac{\beta_{\rho_*(t')}^i}{2} \right) \right]^{\omega(t) \cdot i\omega(\theta)}$$

${}_{left}^{+}\Omega(S_{\lambda(t,\theta)}^{-1}) \wedge {}_{right}^{-}\Omega(S_{\lambda(t,\theta)}^{-1})$ 为类脑(脑)左、右脑分离，且每片约化的记忆悬浮

$$\left\{ \begin{array}{l} {}_{left}^{+}\Omega(S_{\lambda(t,\theta)}^{-1}) \rightsquigarrow \left[\sin \left(\sum_{i=2}^m \rho_{\theta}^i \cdot \frac{\theta_{\rho(t')}^i}{2} \wedge \sum_{j=2}^m \rho_{\beta}^i \cdot \frac{\beta_{\rho(t')}^i}{2} \right) \right]^{\omega(t)^{i\omega(\theta)}} \\ {}_{right}^{-}\Omega(S_{\lambda(t,\theta)}^{-1}) \rightsquigarrow \left[\cos \left(\sum_{j=2}^p \rho_{*,\theta}^i \cdot \frac{\theta_{\rho_*}^i(t')}{2} \wedge \sum_{i=2}^q \rho_{*,\beta}^i \cdot \frac{\beta_{\rho_*}^i(t')}{2} \right) \right]^{\omega(t)^{i\omega(\theta)}} \end{array} \right.$$

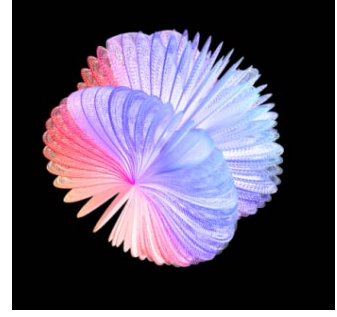
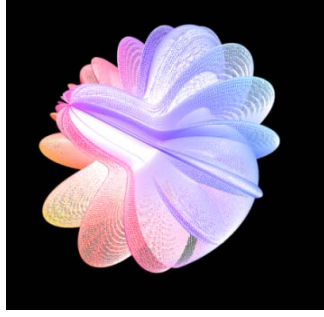
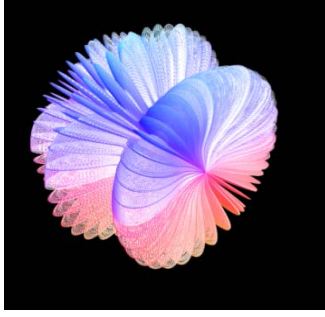
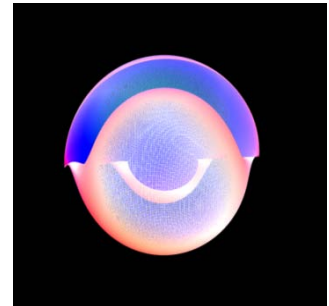
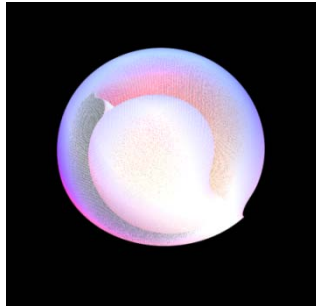
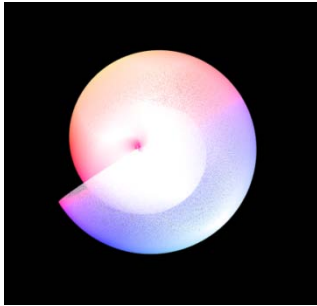


Fig08. 密钥群的生成序列到乔治.康托尔猜想_ RLLM 增强思维能力搜索增强微调 and 收缩参数群尺度_更高维度幂函数为高维度复变弦线丛势生成序列

$$\left\{ \begin{array}{l} {}_{left}^{+}\Omega(S_{\lambda(t,\theta)}^{-1}) \rightsquigarrow \left[\sin^2 \left(\sum_{i=2}^m \theta^i \cdot \frac{\theta_{\rho(t')}^i}{2} \right) + \cos^2 \left(\sum_{j=2}^m \theta_*^j \cdot \frac{\theta_{\rho(t')}^j}{2} \right) \right]^{\omega(t)^{i\omega(\theta)}} \\ {}_{right}^{-}\Omega(S_{\lambda(t,\theta)}^{-1}) \rightsquigarrow \left[\sin^2 \left(\sum_{i=2}^m \beta^i \cdot \frac{\beta_{\rho(t')}^i}{2} \right) + \cos^2 \left(\sum_{j=2}^m \beta_*^j \cdot \frac{\beta_{\rho(t')}^j}{2} \right) \right]^{\omega(t)^{i\omega(\theta)}} \end{array} \right.$$

根据 $\theta^i \cdot \frac{\theta_{\rho(t')}^i}{2} = 1/t \times \theta_{\rho}^{i-1} \times \theta^i = 1/t \times \theta_{\rho}^{i-1} \times \theta^i = \frac{1}{t} \cdot \theta_{\rho}^i$; 所以上式可以写为

$$\left\{ \begin{array}{l} {}_{left}^{+}S_{\lambda(t,\theta)}^{-1} \rightsquigarrow \left[\sin^2 \left(\sum_{i=2}^m \frac{1}{t} \cdot \theta_{\rho}^i \right) + \cos^2 \left(\sum_{j=2}^m \frac{1}{t} \cdot \theta_{\rho}^j \right) \right]^{\omega(t)^{i\omega(\theta)}} \\ {}_{right}^{-}S_{\lambda(t,\theta)}^{-1} \rightsquigarrow \left[\sin^2 \left(\sum_{i=2}^m \frac{1}{t} \cdot \beta_{\rho}^i \right) + \cos^2 \left(\sum_{j=2}^m \frac{1}{t} \cdot \beta_{\rho}^j \right) \right]^{\omega(t)^{i\omega(\theta)}} \end{array} \right.$$



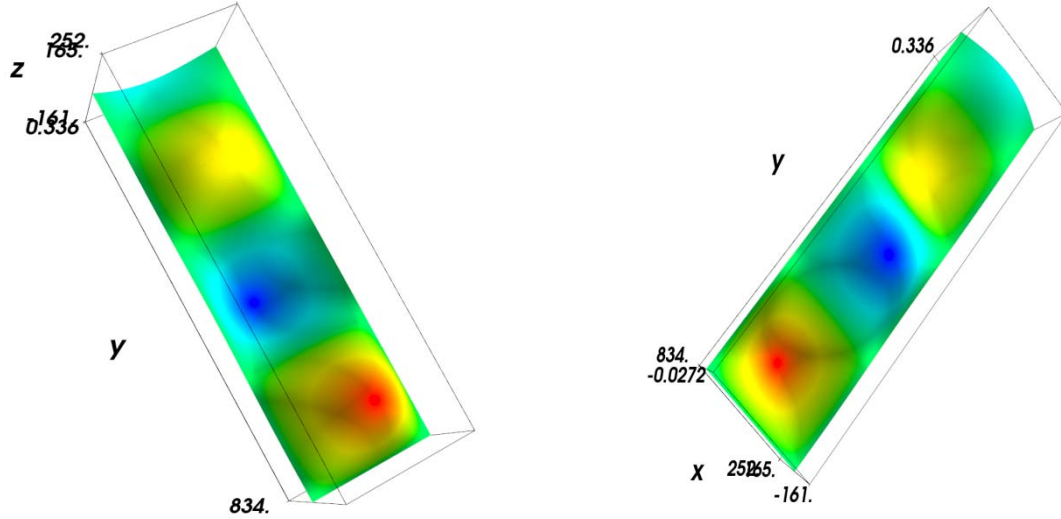


Fig09. 密钥群的生成序列到乔治.康托尔猜想_ RLLM 增强思维能力搜索增强微调和收缩参数群尺度_更高维度幂函数为高维度复变弦线丛核势生成序列

.聚核势生成序列分布在时间 t 切丛上(且在多维类脑空间中);所以也属于弦线丛势生成序列的线性高维线圈。

$$+^{\wedge-} \Omega_{t(\theta)}^{S_{\theta}^{-1}} \rightsquigarrow \sum_{i=1}^m \langle left^{+} S_{\lambda(t, \theta_i)}^{-1}, right^{-} S_{\lambda(t, \theta_i)}^{-1} \rangle$$

$$\int^{+^{\wedge-}} C_{t(\theta_i)}^{\sum_{i=1}^m} \rightsquigarrow \langle left^{+} S_{\lambda(t, \theta)}^{-1}, right^{-} S_{\lambda(t, \theta)}^{-1} \rangle$$

对偶密钥群核势生成序列在不同切空间 $\langle \Omega_{T|_1}^{i\omega} \frac{1}{0} |_{\Lambda t'(\theta)}, \Omega_{T|_1}^{i\omega-1} \frac{1}{0} |_{\Lambda t'(\theta)} \rangle, \langle \Omega_{T|_1}^{i\omega} \frac{1}{0} |_{\Lambda t'(\beta)}, \Omega_{T|_1}^{i\omega-1} \frac{1}{0} |_{\Lambda t'(\beta)} \rangle$ 的存在性,一般在高一维、低一维切丛核势的密钥群生成序列。两种不同推到方法,最后结果是一致的,一个是由纯理论数学猜想理论推导,而另一个从实际出发,利用高维 3D 数模推导过程;进一步证明了两者的相互验证的各种定理、推论等。

$$\langle \Omega_{T|_1}^{i\omega} \frac{1}{0} |_{\Lambda t'(\theta)}, \Omega_{T|_1}^{i\omega-1} \frac{1}{0} |_{\Lambda t'(\theta)} \rangle \cdot a_{mm}^{\uparrow\downarrow} \xrightarrow{\text{正交切丛}} \langle {}^{\theta} \Omega_{T|_1}^{i\omega} \frac{1}{0} |_{\Lambda \rho'_{\theta}(t)}, {}^{\theta} \Omega_{T|_1}^{i\omega-1} \frac{1}{0} |_{\Lambda \rho'_{\theta}(t)} \rangle \cdot a_{nn}^{\uparrow\downarrow}$$

$$\langle \Omega_{T|_1}^{i\omega} \frac{1}{0} |_{\Lambda t'(\beta)}, \Omega_{T|_1}^{i\omega-1} \frac{1}{0} |_{\Lambda t'(\beta)} \rangle \cdot a_{mm}^{\uparrow\downarrow} \xrightarrow{\text{正交切丛}} \langle {}^{\beta} \Omega_{T|_1}^{i\omega} \frac{1}{0} |_{\Lambda \rho'_{\beta}(t)}, {}^{\beta} \Omega_{T|_1}^{i\omega-1} \frac{1}{0} |_{\Lambda \rho'_{\beta}(t)} \rangle \cdot a_{nn}^{\uparrow\downarrow}$$

$$\langle {}^{\theta} \Omega_{T|_1}^{i\omega} \frac{1}{0} |_{\Lambda \rho'_{\theta}(t)}, {}^{\theta} \Omega_{T|_1}^{i\omega-1} \frac{1}{0} |_{\Lambda \rho'_{\theta}(t)} \rangle \cdot a_{nn}^{\uparrow\downarrow} \rightsquigarrow \langle \sum_{i=2}^m \theta^i \cdot \frac{\theta_{\rho'}^i(t)}{2}, \sum_{j=2}^m \theta^j \cdot \frac{\theta_{\rho'}^j(t)}{2} \rangle_{\langle \sin, \cos \rangle}^{i\omega, i\omega-1} \cdot a_{mm}^{\uparrow\downarrow}$$

$$\langle {}^{\beta} \Omega_{T|_1}^{i\omega} \frac{1}{0} |_{\Lambda \rho'_{\beta}(t)}, {}^{\beta} \Omega_{T|_1}^{i\omega-1} \frac{1}{0} |_{\Lambda \rho'_{\beta}(t)} \rangle \cdot a_{nn}^{\uparrow\downarrow} \rightsquigarrow \langle \sum_{i=2}^m \beta^i \cdot \frac{\beta_{\rho'}^i(t)}{2}, \sum_{j=2}^m \beta^j \cdot \frac{\beta_{\rho'}^j(t)}{2} \rangle_{\langle \sin, \cos \rangle}^{i\omega, i\omega-1} \cdot a_{mm}^{\uparrow\downarrow}$$

对偶密钥群核势的凸核,并在时间锥的高一维、低一维的旋转中形变与穿越不同空间 $\langle \Omega_{T|_1}^{i\omega} \frac{1}{0} |_{\Lambda t'(\theta)},$

$\Omega_{T|_1}^{i\omega-1} \frac{1}{0} |_{\Lambda t'(\theta)} \rangle \cdot a_{mm}^{\uparrow\downarrow}, \langle \Omega_{T|_1}^{i\omega} \frac{1}{0} |_{\Lambda t'(\beta)}, \Omega_{T|_1}^{i\omega-1} \frac{1}{0} |_{\Lambda t'(\beta)} \rangle \cdot a_{nn}^{\uparrow\downarrow}$, 这种超曲面表面凸核(对偶核势)有规律分布;而对

偶核势 $\langle a_{nn}^{\uparrow\downarrow}, a_{mm}^{\uparrow\downarrow} \rangle$ 与 $t'(\theta)$ 分布直接相关。

$$\begin{aligned}
 & \langle \frac{1}{t_1} \cdot \theta \Omega_{T|1}^{i\omega} \frac{1}{0} |_{\wedge \rho_\theta(t)}, \frac{1}{t_2} \cdot \theta \Omega_{T|0}^{i\omega-1} \frac{1}{1} |_{\wedge \rho_\theta(t)} \rangle \cdot a_{nn}^{\uparrow\downarrow} \rightsquigarrow \langle \frac{1}{t_1} \cdot \sum_{i=3}^m \theta^i \cdot \frac{\theta_{\rho(t)}^{i-1}}{2}, \frac{1}{t_2} \cdot \sum_{j=3}^m \theta_*^j \cdot \frac{\theta_{\rho(t)}^{j-1}}{2} \rangle_{\langle i\omega, i\omega-1 \rangle} \cdot a_{mm}^{\uparrow\downarrow} \\
 & \langle \frac{1}{t_1} \cdot \beta \Omega_{T|1}^{i\omega} \frac{1}{0} |_{\wedge \rho_\beta(t)}, \frac{1}{t_2} \cdot \beta \Omega_{T|0}^{i\omega-1} \frac{1}{1} |_{\wedge \rho_\beta(t)} \rangle \cdot a_{nn}^{\uparrow\downarrow} \\
 & \rightsquigarrow \langle \frac{1}{t_1} \cdot \sum_{i=3}^m \beta^i \cdot \frac{\beta_{\rho(t)}^{i-1}}{2}, \frac{1}{t_2} \cdot \sum_{j=3}^m \beta_*^j \cdot \frac{\beta_{\rho(t)}^{j-1}}{2} \rangle_{\langle i\omega, i\omega-1 \rangle} \cdot a_{mm}^{\uparrow\downarrow}, \text{ and } \frac{1}{t_1} \sim \frac{1}{T|1} \frac{1}{0} \frac{1}{1}, \frac{1}{t_2} \sim \frac{1}{T|0} \frac{1}{1} \frac{0}{1} \\
 & \langle \langle \theta, \beta \rangle \Omega_{T^2|1}^{i\omega} \frac{1}{0} |_{\wedge \rho_{\langle \theta, \beta \rangle}(t)}, \langle \theta, \beta \rangle \Omega_{T^2|0}^{i\omega-1} \frac{1}{1} |_{\wedge \rho_{\langle \theta, \beta \rangle}(t)} \rangle \cdot a_{nn}^{\uparrow\downarrow} \\
 & \rightsquigarrow \langle T^{-1} | \frac{0}{1} \frac{1}{0} | \cdot \sum_{s=3}^m \theta^s \cdot \frac{\theta_{\rho(t)}^{s-1}}{2}, T^{-1} | \frac{1}{0} \frac{0}{1} | \cdot \sum_{s=3}^m \beta^s \cdot \frac{\beta_{\rho(t)}^{s-1}}{2} \rangle_{\langle i\omega, i\omega-1 \rangle} \cdot a_{mm}^{\uparrow\downarrow}, \text{ and} \\
 & T^2 | \frac{0}{1} \frac{1}{0} | \rightsquigarrow \langle \theta, \beta \rangle, T^2 | \frac{1}{0} \frac{0}{1} | \rightsquigarrow \langle \beta, \theta \rangle, T | \frac{0}{1} \frac{1}{0} | \rightsquigarrow \theta, T | \frac{1}{0} \frac{0}{1} | \rightsquigarrow \beta \quad (11)
 \end{aligned}$$

所以上式 $T^2 | \frac{0}{1} \frac{1}{0} |, T^2 | \frac{1}{0} \frac{0}{1} |$ 表示对偶密钥群核势生成序列的正交切丛的滑动模态。即可以用 $e^2 | \frac{0}{1} \frac{1}{0} |, e^2 | \frac{1}{0} \frac{0}{1} |$ 来表示高一维单元层次上对偶密钥群核势正交滑动模态；而 $\langle T^{-1} | \frac{0}{1} \frac{1}{0} |, T^{-1} | \frac{1}{0} \frac{0}{1} | \rangle$ or $\langle e^{-1} | \frac{0}{1} \frac{1}{0} |, e^{-1} | \frac{1}{0} \frac{0}{1} | \rangle$ 表示低一维对偶密钥群切丛核势的密钥群生成序列正交滑动模态，组合模式 $\langle e^{-1} | \frac{0}{1} \frac{1}{0} |, e^{-1} | \frac{1}{0} \frac{0}{1} | \rangle \wedge \langle e^{-1} | \frac{0}{1} \frac{1}{0} |, e^{-1} | \frac{1}{0} \frac{0}{1} | \rangle \sim e^{-2} | \frac{0}{1} \frac{1}{0} | \wedge e^{-2} | \frac{1}{0} \frac{0}{1} |$ 。仔细观察两种正交模态[高一维对偶密钥群切丛核势、低一维对偶密钥群切丛核势]形式

$$\langle e^2 | \frac{0}{1} \frac{1}{0} |, e^2 | \frac{1}{0} \frac{0}{1} | \rangle \leftrightarrow \langle e^{-2} | \frac{0}{1} \frac{1}{0} | \wedge e^{-2} | \frac{1}{0} \frac{0}{1} | \rangle$$

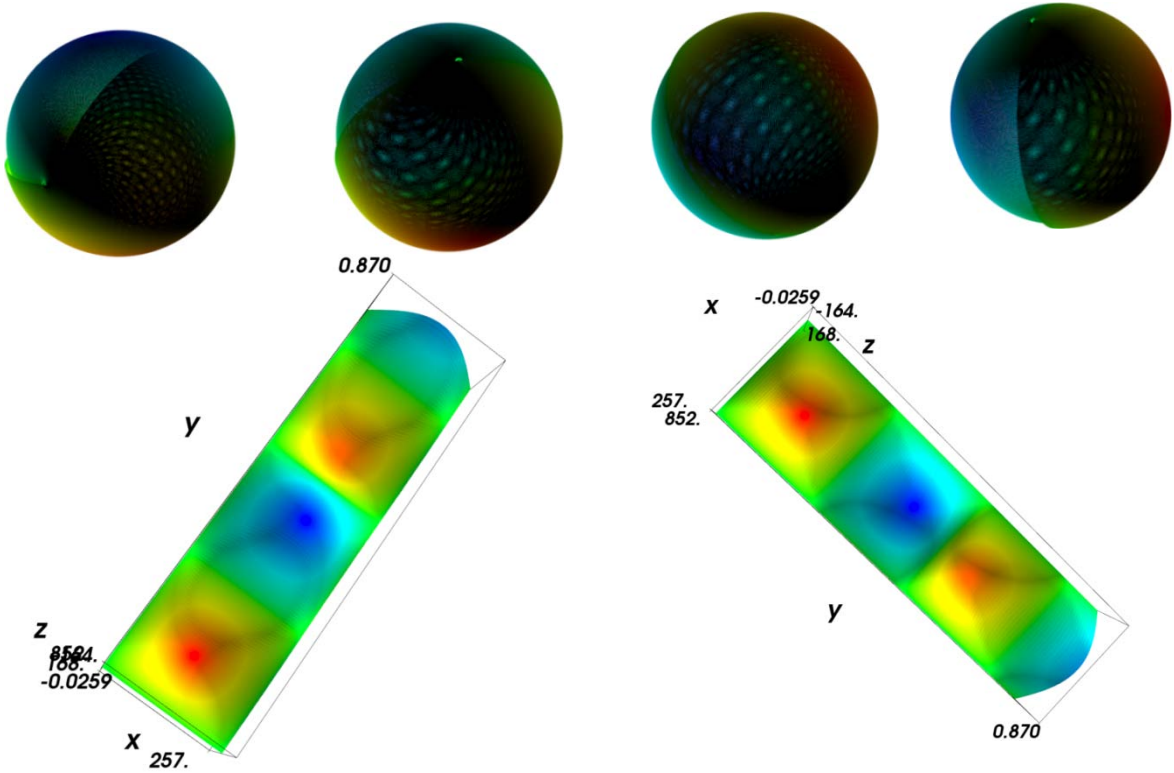


Fig10. RLLM 增强思维能力搜索增强微调 and 收缩参数群尺度_对偶密钥群核势生成序列在不同切空间 $\Omega_{T_1}^{i\omega} \big|_1^0 \big|_{\Lambda'(\theta)}$,

$\Omega_{T_1}^{i\omega-1} \big|_1^0 \big|_{\Lambda'(\theta)}$, 高一维、低一维切丛核势的密钥群生成序列; 而 $\langle e^2 \big|_1^0 \big|_0, e^2 \big|_0^1 \big|_1 \rangle$ 高一维单元层次上对偶密钥群核势正交滑动模态, $\langle e^{-2} \big|_1^0 \big|_0 \wedge e^{-2} \big|_0^1 \big|_1 \rangle$ 低一维切丛核势的密钥群生成序列正交滑动模态 (参数 $\theta, \beta = \pi/255, \pi/255$, $t_1 = 10, t_2 = 20, \omega = 2, \omega - 1 = 1.5$)

. 若 $H_{(f \otimes F)}$ 调和映照稳定、平坦时, 时间切点 t_i^V , 其核势 $a_{ii}^{(kk)}$ 曲面相切、时间线法线向量相交; 而 $\mathcal{N}_1$ 旋转缠绕 $\mathcal{N}_0$ 主轴的复变函数对交叉域进行非线性跨域、生成序列周期 $a_{\omega=i2\pi}^{(nm)\uparrow\downarrow}$; 而隐蔽时间线和高维生成序列的势形成卷积势的空间结构。

$$\begin{aligned}
 P_{H_{(f \otimes F)}}^{\partial M_{\Omega}^s \wedge} \left(\Omega_{Q_E^2(\rho_{(\theta, \beta)}(t'))_t}^{(i\omega, i\omega-1)} \cdot a_{mm}^{\uparrow\downarrow} \right) &\rightsquigarrow \left\langle \sin^2 \left(\frac{1}{T_1} \cdot \sum_{s=3}^m \rho_{\theta}^s \cdot \frac{\theta_{\rho(t)}^{s-1}}{2} \right) \wedge \cos^2 \left(\frac{1}{T_2} \cdot \sum_{s=3}^m \rho_{\beta}^s \cdot \frac{\beta_{\rho(t)}^{s-1}}{2} \right) \right\rangle \langle i\omega, i\omega-1 \rangle \cdot a_{mm}^{\uparrow\downarrow} \\
 P_{H_{(f \otimes F)}}^{\partial M_{\Omega}^s \wedge} \left(\Omega_{Q_E^2(\rho_{(\theta, \beta)}(t'))_t}^{(i\omega, i\omega-1)} \cdot a_{mm}^{\uparrow\downarrow} \right) &\rightsquigarrow \left\langle \sin^{2n} \left(\frac{1}{T_1} \cdot \sum_{s=3}^m \rho_{\theta}^s \cdot \frac{\theta_{\rho(t)}^{s-1}}{2} \right) \wedge \cos^{2n} \left(\frac{1}{T_2} \cdot \sum_{s=3}^m \rho_{\beta}^s \cdot \frac{\beta_{\rho(t)}^{s-1}}{2} \right) \right\rangle \langle i\omega, i\omega-1 \rangle \cdot a_{mm}^{\uparrow\downarrow}, \text{ and } \left\langle \frac{1}{T_1}, \frac{1}{T_2} \right\rangle \rightsquigarrow
 \end{aligned}$$

$\langle e_1 \perp e_2 \rangle$, 即 $e_1 \times e_2 = 0$

$$\begin{aligned}
 \langle \langle \theta, \beta \rangle \Omega_{T^2}^{i\omega} \big|_1^0 \big|_0 \wedge \rho_{(\theta, \beta)}(t) \rangle, \langle \langle \theta, \beta \rangle \Omega_{T^2}^{i\omega-1} \big|_1^0 \big|_1 \wedge \rho_{(\theta, \beta)}(t) \rangle \cdot a_{nn}^{\uparrow\downarrow} &\rightsquigarrow \langle T^{-1} \big|_1^0 \big|_1, T^{-1} \big|_0^1 \big|_0 \rangle \cdot \sum_{s=3}^m \theta^s \cdot \frac{\theta_{\rho(t)}^{s-1}}{2}, T^{-1} \big|_0^1 \big|_1 \cdot \sum_{s=3}^m \beta^s \cdot \frac{\beta_{\rho(t)}^{s-1}}{2} \rangle \langle i\omega, i\omega-1 \rangle \cdot a_{mm}^{\uparrow\downarrow} \\
 \langle \langle \theta, \beta \rangle \Omega_{T^2}^{i\omega} \big|_1^0 \big|_0 \wedge \rho_{(\theta, \beta)}(t) \rangle, \langle \langle \theta, \beta \rangle \Omega_{T^2}^{i\omega-1} \big|_1^0 \big|_1 \wedge \rho_{(\theta, \beta)}(t) \rangle \cdot a_{nn}^{\uparrow\downarrow} &\rightsquigarrow \left\langle \sin \left(T^{-1} \big|_1^0 \big|_1 \cdot \sum_{s=3}^m \theta^s \cdot \frac{\theta_{\rho(t)}^{s-1}}{2} \right), \cos \left(T^{-1} \big|_0^1 \big|_1 \cdot \sum_{s=3}^m \beta^s \cdot \frac{\beta_{\rho(t)}^{s-1}}{2} \right) \right\rangle \langle i\omega, i\omega-1 \rangle \cdot a_{mm}^{\uparrow\downarrow} \quad (16)
 \end{aligned}$$

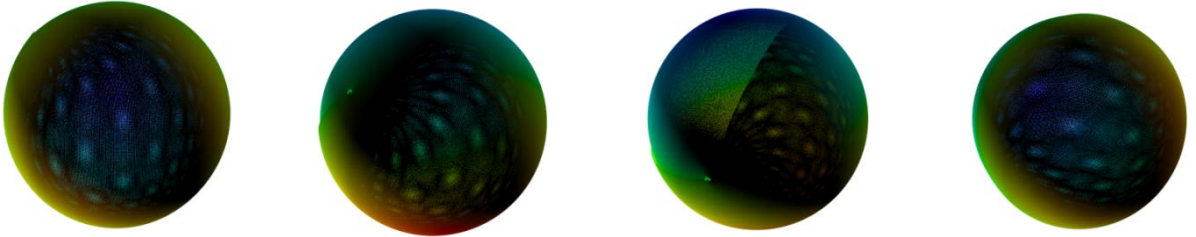


Fig11. RLLM 增强思维能力搜索增强微调 and 收缩参数群尺度_ $H_{(f \otimes F)}$ 调和映照稳定、平坦时, 时间切点 t_i^V , 其核势 $a_{ii}^{(kk)}$ 曲面相切、时间线法线向量相交; 而 $\mathcal{N}_1$ 旋转缠绕 $\mathcal{N}_0$ 主轴的复变函数对交叉域进行非线性跨域、生成序列周期 $a_{\omega=i2\pi}^{(nm)\uparrow\downarrow}$; 而隐蔽时间线和高维生成序列的势形成卷积势的空间结构

$$\begin{aligned}
 P_{H_{(f \otimes F)}}^{\partial M_{\Omega}^s \wedge} \left(\Omega_{Q_E^2(\rho_{(\theta, \beta)}(t'))_t}^{(i\omega, i\omega-1)} \cdot a_{mm}^{\uparrow\downarrow} \right) &\rightsquigarrow \left\langle \sin^{2n} \left(\frac{1}{T_1} \cdot \sum_{s=3}^m \rho_{\theta}^s \cdot \frac{\theta_{\rho(t)}^{s-1}}{2} \right) \wedge \cos^{2n} \left(\frac{1}{T_2} \cdot \sum_{s=3}^m \rho_{\beta}^s \cdot \frac{\beta_{\rho(t)}^{s-1}}{2} \right) \right\rangle \langle i\omega, i\omega-1 \rangle \cdot a_{mm}^{\uparrow\downarrow}, \text{ and } \left\langle \frac{1}{T_1}, \frac{1}{T_2} \right\rangle \rightsquigarrow
 \end{aligned}$$

$\langle e_1 \perp e_2 \rangle$, 即 $e_1 \times e_2 = 0$

$$P_{H(f \otimes F)}^{\partial M_{\Omega}^s \wedge} \left(\Omega^{(i\omega, i\omega-1)} \right. \\ \left. Q_E^{2n}(\rho_{(\theta, \beta)}(t'))^{\pm \frac{\pi}{2} + nk\pi} \cdot a_{mm}^{\uparrow \downarrow} \right) \\ \rightsquigarrow \langle \sin^{2n} \left(T^{-1} \begin{vmatrix} 0 & 1 \\ 1 & 0 \end{vmatrix} \cdot \sum_{s=3}^m \rho_{\theta}^s \cdot \frac{\theta_{\rho(t)}^{s-1}}{2} \right) \wedge \cos^{2n} \left(T^{-1} \begin{vmatrix} 1 & 0 \\ 0 & 1 \end{vmatrix} \cdot \sum_{s=3}^m \rho_{\beta}^s \cdot \frac{\beta_{\rho(t)}^{s-1}}{2} \right) \rangle^{(i\omega, i\omega-1)} \cdot a_{mm}^{\uparrow \downarrow} \quad (17)$$

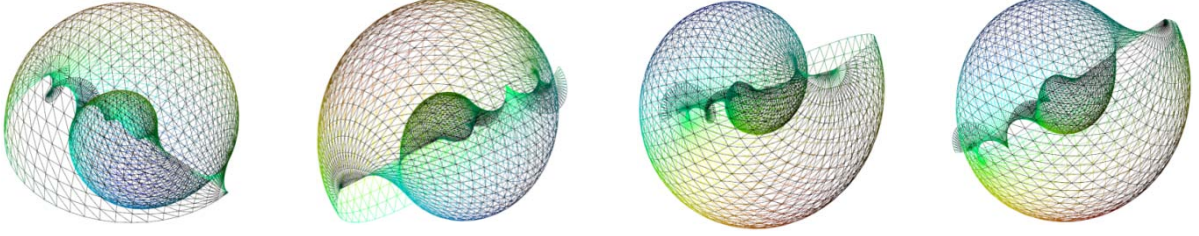


Fig12. RLLM 增强思维能力搜索增强微调收缩参数群尺度 $H_{(f \otimes F)}$ 调和映照稳定、平坦时,时间切点 t_i^V ,其核势 $a_{ii}^{(kk)\uparrow \downarrow}$ 曲面相切、时间线法线向量相交;而 N_1 旋转缠绕 N_0 主轴的复变函数对交叉域进行非线性跨域、生成序列周期 $a_{\omega=i2\pi}^{(nn)\uparrow \downarrow}$;而隐蔽时间线和高维生成序列的势形成卷积势的空间结构

. Fig11. 更高维度幂函数为高维度复变弦线丛核势生成序列;高一维、低一维切丛核势[核势 $a_{ii}^{(kk)\uparrow \downarrow}$ 曲面相切、时间线法线向量相交]的密钥群生成序列的对偶密钥群核势正交滑动模态。所以对偶密钥群核势生成序列位于上图时间锥主轴线上的超曲面,并随之动态、弱非线性旋转而产生密钥群核势[凸核]生成序列。

$$P_{H(f \otimes F)}^{\partial M_{\Omega}^s \wedge} \left(\Omega^{(i\omega, i\omega-1)} \right. \\ \left. Q_E^{2n}(\rho_{(\theta, \beta)}(t'))^{\pm \frac{\pi}{2} + nk\pi} \cdot a_{mm}^{\uparrow \downarrow} \right) \xrightarrow{\text{平坦|降维 } 2n} \langle \langle \theta, \beta \rangle \Omega_{T^2}^{i\omega} \begin{vmatrix} 0 & 1 \\ 1 & 0 \end{vmatrix} \wedge \rho_{(\theta, \beta)}(t), \langle \theta, \beta \rangle \Omega_{T^2}^{i\omega-1} \begin{vmatrix} 1 & 0 \\ 0 & 1 \end{vmatrix} \wedge \rho_{(\theta, \beta)}(t) \rangle \\ \langle \sin^{2n} \left({}^\perp T^{-1} \begin{vmatrix} 0 & 1 \\ 1 & 0 \end{vmatrix} \cdot \sum_{s=3}^m \rho_{\theta}^s \cdot \frac{\theta_{\rho(t)}^{s-1}}{2} \right) \wedge \cos^{2n} \left({}^\perp T^{-1} \begin{vmatrix} 1 & 0 \\ 0 & 1 \end{vmatrix} \cdot \sum_{s=3}^m \rho_{\beta}^s \cdot \frac{\beta_{\rho(t)}^{s-1}}{2} \right) \rangle^{(i\omega, i\omega-1)} \cdot a_{nn}^{\uparrow \downarrow} \\ \xrightarrow{\text{平坦|降维 } 2n | \text{时间锥主轴} \\ \text{法向量旋转密钥群生成序列}} \langle \sin \left(T^{-1} \begin{vmatrix} 0 & 1 \\ 1 & 0 \end{vmatrix} \cdot \sum_{s=3}^m \theta^s \cdot \frac{\theta_{\rho(t)}^{s-1}}{2} \right), \cos \left(T^{-1} \begin{vmatrix} 1 & 0 \\ 0 & 1 \end{vmatrix} \cdot \sum_{s=3}^m \beta^s \cdot \frac{\beta_{\rho(t)}^{s-1}}{2} \right) \rangle^{(i\omega, i\omega-1)} \cdot a_{mm}^{\uparrow \downarrow}$$

$$\left\{ \begin{array}{l} P_{H(f \otimes F)}^{\partial M_{\Omega}^s \wedge} \left(\Omega^{(i\omega, i\omega-1)} \right. \\ \left. Q_E^{2n}(\rho_{(\theta, \beta)}(t'))^{\pm \frac{\pi}{2} + nk\pi} \cdot a_{mm}^{\uparrow \downarrow} \right) \rightsquigarrow \langle \sin^{2n} \left({}^\perp T^{-1} \begin{vmatrix} 0 & 1 \\ 1 & 0 \end{vmatrix} \cdot \sum_{s=3}^m \rho_{\theta}^s \cdot \frac{\theta_{\rho(t)}^{s-1}}{2} \right) \wedge \\ \cos^{2n} \left({}^\perp T^{-1} \begin{vmatrix} 1 & 0 \\ 0 & 1 \end{vmatrix} \cdot \sum_{s=3}^m \rho_{\beta}^s \cdot \frac{\beta_{\rho(t)}^{s-1}}{2} \right) \rangle^{(i\omega, i\omega-1)} \cdot a_{mm}^{\uparrow \downarrow} \\ \langle \langle \theta, \beta \rangle \Omega_{T^2}^{i\omega} \begin{vmatrix} 0 & 1 \\ 1 & 0 \end{vmatrix} \wedge \rho_{(\theta, \beta)}(t), \langle \theta, \beta \rangle \Omega_{T^2}^{i\omega-1} \begin{vmatrix} 1 & 0 \\ 0 & 1 \end{vmatrix} \wedge \rho_{(\theta, \beta)}(t) \rangle \cdot a_{nn}^{\uparrow \downarrow} \rightsquigarrow \langle \sin \left(T^{-1} \begin{vmatrix} 0 & 1 \\ 1 & 0 \end{vmatrix} \cdot \sum_{s=3}^m \theta^s \cdot \frac{\theta_{\rho(t)}^{s-1}}{2} \right), \\ \cos \left(T^{-1} \begin{vmatrix} 1 & 0 \\ 0 & 1 \end{vmatrix} \cdot \sum_{s=3}^m \beta^s \cdot \frac{\beta_{\rho(t)}^{s-1}}{2} \right) \rangle^{(i\omega, i\omega-1)} \cdot a_{mm}^{\uparrow \downarrow} \end{array} \right. \quad (18)$$

对偶密钥群核势凸核生成序列,时间锥主轴切向量旋转密钥群生成序列,非调和映照:

$$\langle \sin \left(T^{-1} \begin{vmatrix} 0 & 1 \\ 1 & 0 \end{vmatrix} \cdot \sum_{s=3}^m \theta^s \cdot \frac{\theta_{\rho(t)}^{s-1}}{2} \right) + \cos \left(T^{-1} \begin{vmatrix} 1 & 0 \\ 0 & 1 \end{vmatrix} \cdot \sum_{s=3}^m \beta^s \cdot \frac{\beta_{\rho(t)}^{s-1}}{2} \right) \rangle^{(i\omega, i\omega-1)} \cdot a_{mm}^{\uparrow\downarrow}, \text{ and } s=2, \omega-1, \omega=1.5$$

.对偶密钥群核势凸核生成序列形成的超曲面随时间锥主轴切向旋转塌陷,并随之不断从在更高维或更低维的时间锥旋转中的主轴附近产生新的对偶密钥群核势凸核生成序列,然后继续往复。

对偶密钥群_密钥表:

$$\langle \sin \left(T^{-1} \begin{vmatrix} 0 & 1 \\ 1 & 0 \end{vmatrix} \cdot \sum_{s=3}^m \theta^s \cdot \frac{\theta_{\rho(t)}^{s-1}}{2} \right) \rangle^{(i\omega, i\omega-1)}$$

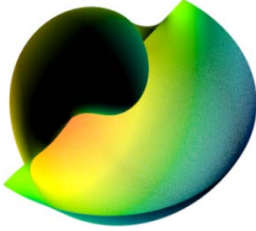


Fig13.对偶密钥群[低维密钥表]

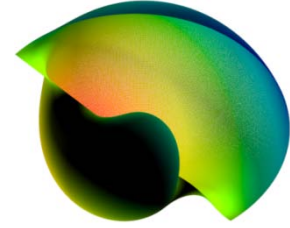


Fig14.对偶密钥群[低维密钥表]

对偶密钥群_密码表生成序列:

$$\langle \cos \left(T^{-1} \begin{vmatrix} 1 & 0 \\ 0 & 1 \end{vmatrix} \cdot \sum_{s=3}^m \beta^s \cdot \frac{\beta_{\rho(t)}^{s-1}}{2} \right) \rangle^{(i\omega, i\omega-1)} \cdot a_{nn}^{\uparrow\downarrow}$$

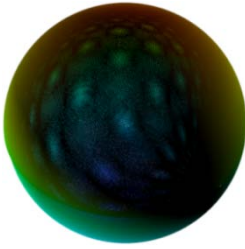


Fig15.对偶密钥群核势凸核[密码表]生成序列

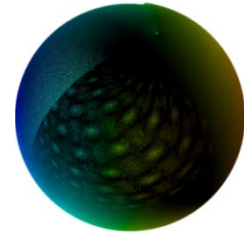


Fig16.对偶密钥群核势凸核[密码表]生成序列

对偶密钥群_密钥表[容器]:

$$\langle \cos^{2n} \left(T^{-1} \begin{vmatrix} 0 & 1 \\ 1 & 0 \end{vmatrix} \cdot \sum_{s=3}^m \rho_{\theta}^s \cdot \frac{\theta_{\rho(t)}^{s-1}}{2} \right) \rangle^{(i\omega, i\omega-1)}$$

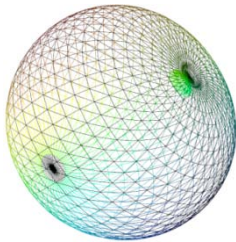


Fig17.对偶密钥群[容器]

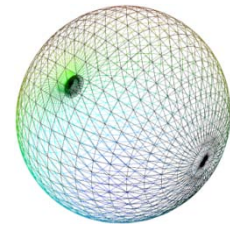


Fig18.对偶密钥群[容器]

对偶密钥群_高维密钥时间锥【表】:

$$\langle \cos^{2n} \left(T^{-1} \begin{vmatrix} 1 & 0 \\ 0 & 1 \end{vmatrix} \cdot \sum_{s=3}^m \rho_{\beta}^s \cdot \frac{\beta_{\rho(t)}^{s-1}}{2} \right) \rangle^{(i\omega, i\omega-1)}$$

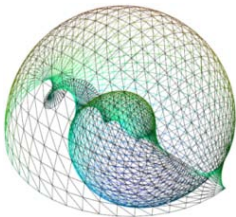


Fig19.对偶密钥群_高维密钥时间锥[高维密钥表]

时间锥主轴切(法)向量旋转密钥群生成序列,

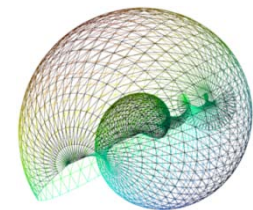


Fig20.对偶密钥群_高维密钥时间锥[高维密钥表]

时间锥主轴切(法)向量旋转密钥群生成序列

对偶密钥群_密码表生成序列: $\langle \cos \left(T^{-1} \begin{vmatrix} 1 & 0 \\ 0 & 1 \end{vmatrix} \cdot \sum_{s=3}^m \beta^s \cdot \frac{\beta_{\rho(t)}^{s-1}}{2} \right) \rangle_{a_{nm}^{\uparrow \downarrow}}^{(i\omega, i\omega-1)} \cdot a_{nm}^{\uparrow \downarrow}, \text{ and } s = 2, \omega - 1, \omega = 1.5$

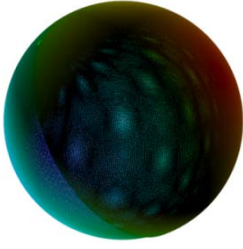


Fig21.对偶密钥群核势凸核【密码表】生成序列

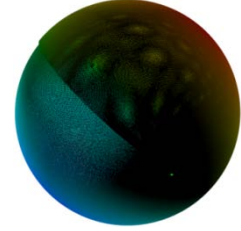


Fig22.对偶密钥群核势凸核【密码表】生成序列

对偶密钥群核势凸核的密码表之生成序列,至对偶密钥群高一维密钥表时,每次都会产生一阶能量,即类脑(脑)神经元波动单位能量结构和方向矢量

$$\langle \sin \left(T^{-1} \begin{vmatrix} 0 & 1 \\ 1 & 0 \end{vmatrix} \cdot \sum_{s=3}^m \theta^s \cdot \frac{\theta_{\rho(t)}^{s-1}}{2} \right) \rangle_{a_{nm}^{\uparrow \downarrow}} \vee \langle \cos \left(T^{-1} \begin{vmatrix} 1 & 0 \\ 0 & 1 \end{vmatrix} \cdot \sum_{s=3}^m \beta^s \cdot \frac{\beta_{\rho(t)}^{s-1}}{2} \right) \rangle_{a_{nm}^{\uparrow \downarrow}}^{(i\omega, i\omega-1)} \rightsquigarrow a_{nm}^{\uparrow \downarrow},$$

$$\text{and } T^{-1} \begin{vmatrix} 0 & 1 \\ 1 & 0 \end{vmatrix} \times T^{-1} \begin{vmatrix} 1 & 0 \\ 0 & 1 \end{vmatrix}, e^{-1} \times e_*^{-1}$$

$$Q_E^2(\rho_{(\theta, \beta)}(t')) \sim \langle \sin \left(\frac{1}{t_1} \cdot \sum_{s=3}^m \theta^s \cdot \frac{\theta_{\rho(t)}^{s-1}}{2} \right) \wedge \cos \left(\frac{1}{t_2} \cdot \sum_{s=3}^m \beta^s \cdot \frac{\beta_{\rho(t)}^{s-1}}{2} \right) \rangle_{a_{nm}^{\uparrow \downarrow}}^{(i\omega, i\omega-1)}$$

对偶密钥群_高一维密钥表: $\langle \cos^{2n} \left(T^{-1} \begin{vmatrix} 1 & 0 \\ 0 & 1 \end{vmatrix} \cdot \sum_{s=3}^m \rho_{\beta}^s \cdot \frac{\beta_{\rho(t)}^{s-1}}{2} \right) \rangle_{a_{nm}^{\uparrow \downarrow}}^{(i\omega, i\omega-1)}, \text{ and } s = 2, \omega - 1, \omega = 2.5$

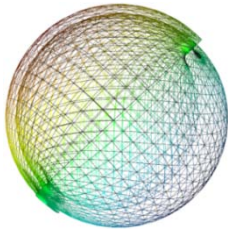


Fig23.对偶密钥群_高维密钥群【高一维密钥表】

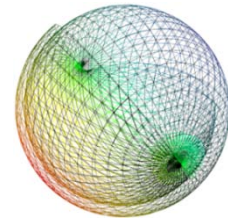


Fig24.对偶密钥群_高维密钥群【高一维密钥表】

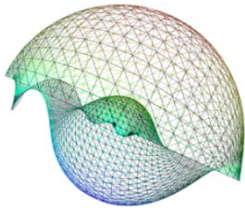


Fig25.偶密钥群_高维密钥群【高维密钥表】

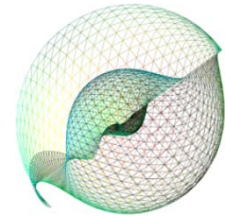


Fig26.对偶密钥群_高维密钥群【高维密钥表】

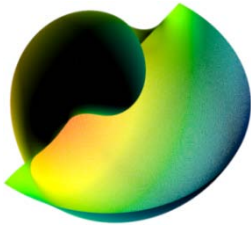


Fig27.对偶密钥群【低维密钥表】

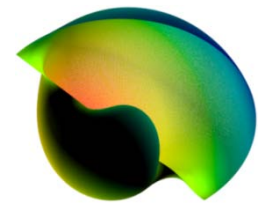


Fig28.对偶密钥群【低维密钥表】

.对偶密钥群核势凸核密码生成序列

$$a_{nm}^{\uparrow\downarrow} \rightsquigarrow r^{\omega^2[l]} \times \int_0^\pi \sin^n \theta d\theta$$

$$\langle \cos \left(T^{-1} \begin{vmatrix} 1 & 0 \\ 0 & 1 \end{vmatrix} \cdot \sum_{s=3}^m \beta^s \cdot \frac{\beta_{\rho(t)}^{s-1}}{2} \right) \rangle^{(i\omega, i\omega-1)} \rightsquigarrow \rho^{\omega^2[l]} \times \int_0^\pi \sin^{(i\omega, i\omega-1)-1} \theta d\theta, \quad \text{and if } n = \langle i\omega - 1, i\omega - 2 \rangle$$

$$\cos^{(i\omega, i\omega-1)} \left(\frac{1}{t_1} \cdot \sum_{s=3}^m \beta^s \cdot \frac{\beta_{\rho(t)}^{s-1}}{2} \right) \rightsquigarrow \rho^{\omega^2[l]} \int_0^\pi \sin^{(i\omega, i\omega-1)-1} \theta d\theta \text{ then}$$

$$\cos^{(i\omega, i\omega-1)} \left(\frac{1}{t_1} \cdot \sum_{s=3}^m \beta^s \cdot \frac{\beta_{\rho(t)}^{s-1}}{2} \right) \rightsquigarrow -\rho^{\omega^2[l]} \cos^{(i\omega, i\omega-1)}(\theta), \text{ and } \rho^{\omega^2[l]} = \mp 1 \text{ then}$$

$$\theta = \frac{1}{t_1} \cdot \sum_{s=3}^m \beta^s \cdot \frac{\beta_{\rho(t)}^{s-1}}{2}, \text{ and } \rho_t^{\omega^2[l]} = \mp 1, \quad \therefore$$

$$\langle \cos \left(T^{-1} \begin{vmatrix} 1 & 0 \\ 0 & 1 \end{vmatrix} \cdot \sum_{s=3}^m \beta^s \cdot \frac{\beta_{\rho(t)}^{s-1}}{2} \right) \rangle_{a_{nm}^{\uparrow\downarrow}}^{(i\omega, i\omega-1)} \rightsquigarrow a_{nm}^{\uparrow\downarrow}, \quad a_{nm}^{\uparrow\downarrow} \rightsquigarrow r^{\omega^2[l]} \times \int_0^\pi \sin^n \theta d\theta$$

$$\langle \cos \left(T^{-1} \begin{vmatrix} 1 & 0 \\ 0 & 1 \end{vmatrix} \cdot \sum_{s=3}^m \beta^s \cdot \frac{\beta_{\rho(t)}^{s-1}}{2} \right) \rangle^{(i\omega, i\omega-1)} \rightsquigarrow \rho^{\omega^2[l]} \int_0^\pi \sin^{(i\omega-1, i\omega-2)} \theta d\theta,$$

$$\cos^{(i\omega, i\omega-1)} \left(\frac{1}{t_1} \cdot \sum_{s=3}^m \beta^s \cdot \frac{\beta_{\rho(t)}^{s-1}}{2} \right) \rightsquigarrow -\rho^{\omega^2[l]} \cos^{(i\omega, i\omega-1)}(\theta), \text{ and } \rho^{\omega^2[l]} = \mp 1, \quad \therefore$$

$$\theta = -\frac{1}{t_1} \cdot \sum_{s=3}^m \beta^s \cdot \frac{\beta_{\rho(t)}^{s-1}}{2}, \text{ and } \rho_t^{\omega^2[l]} = \mp 1, \quad \therefore$$

.定义理论密钥群生成序列与实际求解对偶密钥群核势凸核密码生成序列

$$a_{nm}^{\uparrow\downarrow} \rightsquigarrow r^{\omega^2[l]} \times \int_0^\pi \sin^n \theta d\theta \text{ 根据实际求解对偶密钥群核势凸核密码生成序列}$$

$$a_{nm}^{\uparrow\downarrow} \rightsquigarrow \langle \cos^{(i\omega, i\omega-1)} \left(T^{-1} \begin{vmatrix} 1 & 0 \\ 0 & 1 \end{vmatrix} \cdot \sum_{s=3}^m \beta^s \cdot \frac{\beta_{\rho(t)}^{s-1}}{2} \right) \rangle \text{ or } \langle \cos^{(i\omega, i\omega-1)} \left(T^{-1} \begin{vmatrix} 0 & 1 \\ 1 & 0 \end{vmatrix} \cdot \sum_{s=3}^m \beta^s \cdot \frac{\beta_{\rho(t)}^{s-1}}{2} \right) \rangle, \text{ 而上式}$$

$$a_{nm}^{\uparrow\downarrow} \rightsquigarrow r^{\omega^2[l]} \times \int_0^\pi \sin^n \theta d\theta, \text{ 所以上述公式中的 } \theta \text{ 可以分解为}$$

$$\theta = -\frac{1}{t_1} \cdot \sum_{s=3}^m \beta^s \cdot \frac{\beta_{\rho(t)}^{s-1}}{2}, \text{ and } \rho_t^{\omega^2[l]} = \mp 1, \quad \therefore$$

$$a_{nm}^{\uparrow\downarrow} \rightsquigarrow \rho^{\omega^2[l]} \times \int_0^\pi \sin^{(i\omega, i\omega-1)} \left(-\frac{1}{t_1} \cdot \sum_{s=3}^m \beta^s \cdot \frac{\beta_{\rho(t)}^{s-1}}{2} \right) d\beta, \text{ 根据 } T^{-1} \begin{vmatrix} 1 & 0 \\ 0 & 1 \end{vmatrix} \text{ or } T^{-1} \begin{vmatrix} 0 & 1 \\ 1 & 0 \end{vmatrix}, \text{ 则有}$$

$$a_{nm}^{\uparrow\downarrow} \rightsquigarrow \mp \rho^{\omega^2[l]} \times \int_0^\pi \sin^{(i\omega, i\omega-1)} \left(\frac{1}{t_1} \cdot \sum_{s=3}^m \beta^s \cdot \frac{\beta_{\rho(t)}^{s-1}}{2} \right) d\beta, \text{ 根据 } T^{-1} \begin{vmatrix} 1 & 0 \\ 0 & 1 \end{vmatrix} \text{ or } T^{-1} \begin{vmatrix} 0 & 1 \\ 1 & 0 \end{vmatrix}, \text{ 也可以用以下形式正确定义}$$

$$a_{nm}^{\uparrow\downarrow} \rightsquigarrow \rho^{\omega^2[l]} \times \int_0^\pi \sin^{(i\omega, i\omega-1)} \left(\frac{1}{t_1} \cdot \sum_{s=3}^m \theta^s \cdot \frac{\theta_{\rho(t)}^{s-1}}{2} \wedge \frac{1}{t_2} \cdot \sum_{s=3}^m \beta^s \cdot \frac{\beta_{\rho(t)}^{s-1}}{2} \right) d\beta d\theta, \quad \therefore$$

$$\begin{aligned} \rho_{\langle\theta,\beta\rangle}^{\omega^2[\cdot]} &\times \int_0^\pi \sin^{(i\omega^*, i\omega^*-1)} \left(\frac{1}{t_1} \cdot \sum_{s=3}^m \theta^s \cdot \frac{\theta_{\rho(t)}^{s-1}}{2} \wedge \frac{1}{t_2} \cdot \sum_{s=3}^m \beta^s \cdot \frac{\beta_{\rho(t)}^{s-1}}{2} \right) d\beta d\theta \\ &\rightsquigarrow \langle \sin \left(\frac{1}{t_1} \cdot \sum_{s=3}^m \theta^s \cdot \frac{\theta_{\rho(t)}^{s-1}}{2} \right) + \cos \left(\frac{1}{t_2} \cdot \sum_{s=3}^m \beta^s \cdot \frac{\beta_{\rho(t)}^{s-1}}{2} \right) \rangle_{a_{nm}^{\uparrow\downarrow}}^{(i\omega, i\omega-1)}, \text{ and } \langle i\omega^*, i\omega^*-1 \rangle \rightsquigarrow \langle i\omega, i\omega-1 \rangle \end{aligned}$$

(19)

上式合理说明理论对偶密钥群核势(凸核)密码生成序列,与实际对偶密钥群核势密码生成序列吻合,即

$$\begin{aligned} a_{nn}^{\uparrow\downarrow} &\rightsquigarrow r^{\omega^2[\cdot]} \times \int_0^\pi \sin^n \theta d\theta \text{ or } a_{nn}^{\uparrow\downarrow} \rightsquigarrow \rho_{\langle\theta,\beta\rangle}^{\omega^2[\cdot]} \times \int_0^\pi \sin^{(i\omega^*, i\omega^*-1)} \left(\frac{1}{t_1} \cdot \sum_{s=3}^m \theta^s \cdot \frac{\theta_{\rho(t)}^{s-1}}{2} \wedge \frac{1}{t_2} \cdot \sum_{s=3}^m \beta^s \cdot \frac{\beta_{\rho(t)}^{s-1}}{2} \right) d\beta d\theta \\ a_{nn}^{\uparrow\downarrow} &\rightsquigarrow \langle \sin \left(T^{-1} \begin{vmatrix} 1 & 0 \\ 0 & 1 \end{vmatrix} \cdot \sum_{s=3}^m \theta^s \cdot \frac{\theta_{\rho(t)}^{s-1}}{2} \right) + \cos \left(T^{-1} \begin{vmatrix} 1 & 0 \\ 0 & 1 \end{vmatrix} \cdot \sum_{s=3}^m \beta^s \cdot \frac{\beta_{\rho(t)}^{s-1}}{2} \right) \rangle_{a_{nn}^{\uparrow\downarrow}}^{(i\omega, i\omega-1)}, \text{ and } s=2, \omega-1, \omega=1.5 \end{aligned}$$

$$\begin{aligned} \Omega_{Q_E^2(\rho_{\langle\theta,\beta\rangle}(t'))}^{(i\omega, i\omega-1)} \cdot a_{nn}^{\uparrow\downarrow} &\rightsquigarrow \rho_{\langle\theta,\beta\rangle}^{\omega^2[\cdot]} \times \int_0^\pi \sin^{(i\omega^*, i\omega^*-1)} \left(\frac{1}{t_1} \cdot \sum_{s=3}^m \theta^s \cdot \frac{\theta_{\rho(t)}^{s-1}}{2} \wedge \frac{1}{t_2} \cdot \sum_{s=3}^m \beta^s \cdot \frac{\beta_{\rho(t)}^{s-1}}{2} \right) d\beta d\theta \\ &\text{, and } Q_E^2(\rho_{\langle\theta,\beta\rangle}(t')) \sim \rho_{\langle\theta,\beta\rangle}^{\omega^2[\cdot]} \end{aligned}$$

$$\Omega_{Q_E^2(\rho_{\langle\theta,\beta\rangle}(t'))}^{(i\omega, i\omega-1)} \cdot a_{nn}^{\uparrow\downarrow} \rightsquigarrow r^{\omega^2[\cdot]} \times \int_0^\pi \sin^n \theta d\theta \text{ or } r^{\omega^2[\cdot]} \times \int_0^\pi \sin^m \beta d\beta, \text{ 变换公式}$$

$$\Omega_{Q_E^2(\rho_{\langle\theta,\beta\rangle}(t'))}^{(i\omega, i\omega-1)} \cdot a_{nn}^{\uparrow\downarrow} \rightsquigarrow \rho_{\langle\theta,\beta\rangle}^{\omega^2[\cdot]} \times \int_0^\pi \sin^{(n,m)} \langle \theta_*, \beta_* \rangle d\beta_* d\theta_*, \quad \text{and } Q_E^2(\rho_{\langle\theta,\beta\rangle}(t')) \sim \rho_{\langle\theta_*, \beta_* \rangle}^{\omega^2[\cdot]}$$

$$Q_E^2(\rho_{\langle\theta,\beta\rangle}(t')) \rightsquigarrow \rho_{\langle\theta,\beta\rangle}^{\omega^2[\cdot]}, \quad Q_E^2(\rho_{\langle\theta,\beta\rangle}(t')) \rightsquigarrow \omega_E^2(\rho_{\langle\theta,\beta\rangle}(t')), \text{ 则有}$$

$$\begin{aligned} \Omega_{Q_E^2(\rho_{\langle\theta,\beta\rangle}(t'))}^{(i\omega, i\omega-1)} \cdot a_{nn}^{\uparrow\downarrow} &\rightsquigarrow \omega_E^2(\rho_{\langle\theta,\beta\rangle}(t')) \times \int_0^\pi \sin^{(i\omega^*, i\omega^*-1)} \left(\frac{1}{t_1} \cdot \sum_{s=3}^m \theta^s \cdot \frac{\theta_{\rho(t)}^{s-1}}{2} \wedge \frac{1}{t_2} \cdot \sum_{s=3}^m \beta^s \cdot \frac{\beta_{\rho(t)}^{s-1}}{2} \right) d\beta d\theta \\ &\text{, and if } Q_E^2 \sim \omega_E^2 \text{ then} \end{aligned}$$

$$\Omega_{Q_E^2(\rho_{\langle\theta,\beta\rangle}(t'))}^{(i\omega, i\omega-1)} \cdot a_{nn}^{\uparrow\downarrow} \rightsquigarrow Q_E^2(\rho_{\langle\theta,\beta\rangle}(t')) \times \int_0^\pi \sin^{(i\omega^*, i\omega^*-1)} \left(\frac{1}{t_1} \cdot \sum_{s=3}^m \theta^s \cdot \frac{\theta_{\rho(t)}^{s-1}}{2} \wedge \frac{1}{t_2} \cdot \sum_{s=3}^m \beta^s \cdot \frac{\beta_{\rho(t)}^{s-1}}{2} \right) d\beta d\theta$$

$$\Omega_{Q_E^2(\rho_{\langle\theta,\beta\rangle}(t'))}^{(i\omega, i\omega-1)} \cdot a_{nn}^{\uparrow\downarrow} \rightsquigarrow Q_E^2(\rho_{\langle\theta,\beta\rangle}(t')) \times \int_0^\pi \sin^{(n,m)} \langle \theta_*, \beta_* \rangle d\beta_* d\theta_*, \text{ and } n, m \rightarrow \omega, \omega-1$$

$$\Omega_{Q_E^2(\rho_{\langle\theta,\beta\rangle}(t'))}^{(i\omega, i\omega-1)} \cdot a_{nn}^{\uparrow\downarrow} \rightsquigarrow Q_E^2(\rho_{\langle\theta,\beta\rangle}(t')) \times \int_0^\pi \sin^{(i\omega, i\omega-1)} \langle \theta, \beta \rangle d\beta d\theta, \quad \therefore$$

$$a_{nn}^{\uparrow\downarrow} \rightsquigarrow Q_E^2(\rho_{\langle\theta,\beta\rangle}(t')) \times \int_0^\pi \sin^{(i\omega, i\omega-1)} \left(\frac{1}{t_1} \cdot \sum_{s=3}^m \theta^s \cdot \frac{\theta_{\rho(t)}^{s-1}}{2} \wedge \frac{1}{t_2} \cdot \sum_{s=3}^m \beta^s \cdot \frac{\beta_{\rho(t)}^{s-1}}{2} \right) d\beta d\theta, \quad \therefore$$

$$a_{mm}^{\uparrow\downarrow} \rightsquigarrow Q_E^2(\rho_{\langle\theta^*, \beta^*\rangle}(t')) \times \int_0^\pi \sin^{(n,m)} \langle \theta^*, \beta^* \rangle d\beta^* d\theta^*, \text{ and if } \theta^* \sim \frac{1}{t_1} \cdot \sum_{s=3}^m \theta^s \cdot \frac{\theta_{\rho(t)}^{s-1}}{2}, \beta^* \sim \frac{1}{t_2} \cdot \sum_{s=3}^m \beta^s \cdot \frac{\beta_{\rho(t)}^{s-1}}{2}$$

$$a_{nn}^{\uparrow\downarrow} \rightsquigarrow \langle \sin \left(T^{-1} \begin{vmatrix} 1 & 0 \\ 0 & 1 \end{vmatrix} \cdot \sum_{s=3}^m \theta^s \cdot \frac{\theta_{\rho(t)}^{s-1}}{2} \right) + \cos \left(T^{-1} \begin{vmatrix} 0 & 1 \\ 1 & 0 \end{vmatrix} \cdot \sum_{s=3}^m \beta^s \cdot \frac{\beta_{\rho(t)}^{s-1}}{2} \right) \rangle_{a_{nn}^{\uparrow\downarrow}}^{(i\omega, i\omega-1)}, \text{ and } s = 2, \omega - 1, \omega = 1.5$$

$$Q_E^2(\rho_{(\theta, \beta)}(t')) \times \int_0^\pi \sin^{(i\omega, i\omega-1)} \left(T^{-1} \begin{vmatrix} 1 & 0 \\ 0 & 1 \end{vmatrix} \cdot \sum_{s=3}^m \theta^s \cdot \frac{\theta_{\rho(t)}^{s-1}}{2} \wedge T^{-1} \begin{vmatrix} 0 & 1 \\ 1 & 0 \end{vmatrix} \cdot \sum_{s=3}^m \beta^s \cdot \frac{\beta_{\rho(t)}^{s-1}}{2} \right) d\beta d\theta \rightsquigarrow a_{nn}^{\uparrow\downarrow}$$

. 上式每次积分都会产生一阶能量，即类脑(脑)神经元波动单位能量结构，和方向矢量

$$\langle \sin \left(T^{-1} \begin{vmatrix} 1 & 0 \\ 0 & 1 \end{vmatrix} \cdot \sum_{s=3}^m \theta^s \cdot \frac{\theta_{\rho(t)}^{s-1}}{2} \right) \wedge \cos \left(T^{-1} \begin{vmatrix} 0 & 1 \\ 1 & 0 \end{vmatrix} \cdot \sum_{s=3}^m \beta^s \cdot \frac{\beta_{\rho(t)}^{s-1}}{2} \right) \rangle_{a_{nn}^{\uparrow\downarrow}}^{(i\omega, i\omega-1)}$$

$$\rightsquigarrow Q_E^2(\rho_{(\theta, \beta)}(t')) \cdot \langle \sin \left(T^{-1} \begin{vmatrix} 1 & 0 \\ 0 & 1 \end{vmatrix} \cdot \sum_{s=3}^m \theta^s \cdot \frac{\theta_{\rho(t)}^{s-1}}{2} \right) \vee \cos \left(T^{-1} \begin{vmatrix} 0 & 1 \\ 1 & 0 \end{vmatrix} \cdot \sum_{s=3}^m \beta^s \cdot \frac{\beta_{\rho(t)}^{s-1}}{2} \right) \rangle_{a_{nn}^{\uparrow\downarrow}}^{(i\omega, i\omega-1)}$$

(20)

变换公式，则有

$$\langle \sin \left(\frac{1}{t_1} \cdot \sum_{s=3}^m \theta^s \cdot \frac{\theta_{\rho(t)}^{s-1}}{2} \right) \vee \cos \left(\frac{1}{t_2} \cdot \sum_{s=3}^m \beta^s \cdot \frac{\beta_{\rho(t)}^{s-1}}{2} \right) \rangle_{a_{mm}^{\uparrow\downarrow}}^{(i\omega, i\omega-1)}, \text{ and } \vee \rightsquigarrow +$$

$$Q_E^2(\rho_{(\theta, \beta)}(t')) \sim \langle \sin \left(\frac{1}{t_1} \cdot \sum_{s=3}^m \theta^s \cdot \frac{\theta_{\rho(t)}^{s-1}}{2} \right) \wedge \cos \left(\frac{1}{t_2} \cdot \sum_{s=3}^m \beta^s \cdot \frac{\beta_{\rho(t)}^{s-1}}{2} \right) \rangle_{a_{mm}^{\uparrow\downarrow}}^{(i\omega, i\omega-1)}$$

$$\langle \sin \left(\frac{1}{t_1} \cdot \sum_{s=3}^m \theta^s \cdot \frac{\theta_{\rho(t)}^{s-1}}{2} \right) \vee \cos \left(\frac{1}{t_2} \cdot \sum_{s=3}^m \beta^s \cdot \frac{\beta_{\rho(t)}^{s-1}}{2} \right) \rangle_{a_{mm}^{\uparrow\downarrow}}^{(i\omega, i\omega-1)} \rightsquigarrow a_{nn}^{\uparrow\downarrow}$$

$$leftharpoonup \Omega(S_{k(t, (\theta, \beta))}^{-1}) \vee rightharpoonup \Omega(S_{k(t, (\theta, \beta))}^{-1})$$

$$\rightsquigarrow \left[\sin \left(\sum_{i=2}^m \rho_{\theta}^i \cdot \frac{\theta_{\rho(t')}^i}{2} \wedge \sum_{j=2}^m \rho_{\beta}^j \cdot \frac{\beta_{\rho(t')}^j}{2} \right) \vee \cos \left(\sum_{j=2}^p \rho_{*, \theta}^i \cdot \frac{\theta_{\rho_*(t')}^i}{2} \wedge \sum_{i=2}^q \rho_{*, \beta}^i \cdot \frac{\beta_{\rho_*(t')}^i}{2} \right) \right]^{\omega(t)^{i\omega(\theta)}} \quad (21)$$

. 密钥群与余切丛在不同切丛形态的切片丛

$$\text{密钥群: } {}^+\Omega_{t'(\theta)}^{S_{\theta}^{-1}}(S_K^{-1}(\rho_{\theta}(t'))) \wedge {}^-\Omega_{t'(\theta)}^{S_{\theta}^{-1}}(S_K^{-1}(\rho_{\theta}(t'))); \text{ 余切丛: } \rho_{\theta}(t'(Q_{MR}^{\text{核心能量}}))$$

$$\text{不同切丛形态(切片丛): } S_K^{-1}(\rho_{(\theta, \beta)}(t'))^{Q_E}$$

$$\rho_{\theta}(t'(Q_E)) \rightsquigarrow \sum_{K \geq 3} ctg^s \left(\sum_{\rho=2}^m \rho_{\theta} \cdot \frac{\theta_{\rho(t')}}{2} \right)_{E_X(t')}^{Q_{MR}}$$

$$Q_E^2(\rho_{(\theta, \beta)}(t')) \rightsquigarrow \rho_{(\theta, \beta)}(t'(Q_E))$$

$$\sum_{K \geq 3} ctg^s \left(\sum_{\rho=2}^m \rho_{\theta} \cdot \frac{\theta_{\rho(t')}}{2} \right)_{E_X(t')}^{Q_{MR}} \rightsquigarrow \langle \sin \left(\frac{1}{T_1} \cdot \sum_{K=3}^m \rho_{\theta}^s \cdot \frac{\theta_{\rho(t)}^{s-1}}{2} \right) + \cos \left(\frac{1}{T_2} \cdot \sum_{K=3}^m \rho_{*, \beta}^s \cdot \frac{\beta_{\rho_*(t)}^{s-1}}{2} \right) \rangle_{a_{nn}^{\uparrow\downarrow}}^{(i\omega, i\omega-1)}$$

$$\text{切丛: } T^{-1} \begin{vmatrix} 1 & 0 \\ 0 & 1 \end{vmatrix} \times T^{-1} \begin{vmatrix} 0 & 1 \\ 1 & 0 \end{vmatrix}; \text{ 余切丛: } \rho_{\theta}(t'(Q_E)) \text{ 为数据导引隐蔽时间线}$$

$$\begin{aligned}
 & +\Omega_{t'(\theta)}^{-1} \left(S_K^{-1} \left(\rho_{\theta}(t') \right) \right) \wedge -\Omega_{t'(\theta)}^{-1} \left(S_K^{-1} \left(\rho_{\theta}(t') \right) \right) \sim +\Omega_{t'(\theta)}^{-1} \left(S_K^{-1} \left(\sum_{K \geq 3}^m ctg^s \left(\sum_{\rho=2}^m \rho_{\theta} \cdot \frac{\theta_{\rho}(t')}{2} \right)^{Q_E} \right) \right) \\
 & \wedge -\Omega_{t'(\theta)}^{-1} \left(S_K^{-1} \left(\sum_{K \geq 3}^m ctg^s \left(\sum_{\rho=2}^m \rho_{\beta} \cdot \frac{\beta_{\rho}(t')}{2} \right)^{Q_E} \right) \right) \quad (22)
 \end{aligned}$$

对偶密钥群核势密码表生成序列，至对偶密钥群高一维密钥表容器

$$\begin{aligned}
 \Omega^{K+1}[\rho(t)]_{S_{Left, right}^{m+k-1}} &= S_{Left, right}^{m+k-1} \left[+\Omega_{t'(\theta)}^{-1} \left(S_K^{-1} \left(\sum_{K \geq 3}^m ctg^s \left(\sum_{\rho=2}^m \rho_{\theta} \cdot \frac{\theta_{\rho}(t')}{2} \right)^{Q_E} \right) \right) \right] \\
 Q_{MR}^{核能} &= Matrix \begin{bmatrix} E_{X_E}^K \otimes X_K^H & & \\ & E_{X_S}^K \otimes X_K^H & \\ & & E_{X_M}^K \otimes X_K^H \end{bmatrix} \text{类脑(脑)眼感知影像相当于 } MR^{H_{ij} Q_i H_{ji}^H} \text{ 信号在脑空间}
 \end{aligned}$$

中如何处理。

$$\begin{aligned}
 \Omega^{K+1}[\langle \theta, \beta \rangle (\rho(t))]_{S_{Left, right}^{m+k-1}} &= S_{Left, right}^{m+k-1} \left[+\Omega_{t'(\theta, \beta)}^{-1} \left(S_K^{-1} \left(\sum_{K \geq 3}^m ctg^s \left(\sum_{\rho=2}^m \rho_{\theta} \cdot \frac{\theta_{\rho}(t')}{2} \right)^{Q_E} \right) \wedge S_K^{-1} \left(\sum_{K \geq 3}^m ctg^s \left(\sum_{\rho=2}^m \rho_{\beta} \cdot \frac{\beta_{\rho}(t')}{2} \right)^{Q_E} \right) \right) \right] \quad (23)
 \end{aligned}$$

.上式为对偶密钥群核势(密码表)生成序列，而其密钥表容器为对偶密钥群更高一维度。

类脑高维形态： $\Omega^{K+1}[\langle \theta, \beta \rangle (\rho(t))]_{S_{Left, right}^{m+k-1}}^{Q_E}$

$$\begin{aligned}
 Q_E^2(\rho_{\langle \theta, \beta \rangle}(t')) &\rightsquigarrow \langle \sin \left(\frac{1}{t_1} \cdot \sum_{s=3}^m \theta^s \cdot \frac{\theta_{\rho(t)}^{s-1}}{2} \right) \wedge \cos \left(\frac{1}{t_2} \cdot \sum_{s=3}^m \beta^s \cdot \frac{\beta_{\rho(t)}^{s-1}}{2} \right) \rangle_{a_{mm}^{11}}^{(i\omega, i\omega-1)} \\
 Matrix \begin{bmatrix} E_{X_E}^K \otimes X_K^H & & \\ & E_{X_S}^K \otimes X_K^H & \\ & & E_{X_M}^K \otimes X_K^H \end{bmatrix}^{Q_E} &\rightsquigarrow \langle \sin^{(i\omega, i\omega-1)} \left(\frac{1}{t_1} \cdot \sum_{s=3}^m \theta^s \cdot \frac{\theta_{\rho(t)}^{s-1}}{2} \right) \wedge \cos^{(i\omega, i\omega-1)} \left(\frac{1}{t_2} \cdot \sum_{s=3}^m \beta^s \cdot \frac{\beta_{\rho(t)}^{s-1}}{2} \right) \rangle_{a_{mm}^{11}}^{\frac{1}{2}}
 \end{aligned}$$

$$\Omega^{K+1}[\langle \theta, \beta \rangle (\rho(t))]_{S_{Left, right}^{m+k-1}}^{Q_{MR}} = \Omega^{K+1} \left[\langle \theta, \beta \rangle \left(\rho_t \left(\sum \frac{\delta}{\omega_i} \times \log |I + R^{-1} \times H_{ij} \times Q_{MR}^{核能} \times H_{ji}^H| \right) \right) \right], \text{ and}$$

$$R^{-1} \text{ 干扰信号, } Q_{MR}^{核能} = Matrix \begin{bmatrix} E_{X_E}^K \otimes X_K^H & & \\ & E_{X_S}^K \otimes X_K^H & \\ & & E_{X_M}^K \otimes X_K^H \end{bmatrix}_i^Q$$

$$\Omega^{K+1} \left[\langle \theta, \beta \rangle \left(\rho \left(t \left(Q_{MR}^{核能} \right) \right) \right) \right] = S_{Left, right}^{m+k-1} \left[+\Omega_{t'(\theta \wedge \beta(Q_{MR}^{核能}))}^{-1} \left(\theta^K \wedge \beta^K \left(Q_{MR}^{核能} \right) \right) \right]$$

$$\Omega_{t'}^{+\wedge-(S_{\partial M}^{-1})^K} \left(\theta^K \wedge \beta^K (Q_{MR}^{\text{核心能量}}) \right) \sim {}^{+\wedge-}\Omega_{t' \langle \theta, \beta \rangle}^{S_{\partial M}^{-1}} \left(S_K^{-1} \left(\sum_{K \geq 3} ctg^s \left(\sum_{\rho=2}^m \rho_\theta \cdot \frac{\theta_{\rho(t')}}{2} \right)^{Q_E} \right) \wedge S_K^{-1} \left(\sum_{K \geq 3} ctg^s \left(\sum_{\rho=2}^m \rho_\beta \cdot \frac{\beta_{\rho(t')}}{2} \right)^{Q_E} \right) \right) , \text{ and } t' \langle \theta \wedge \beta \rangle \rightsquigarrow t' \langle \theta, \beta \rangle \quad (24)$$

$$(S_K^{-1})^K \langle \theta, \beta \rangle_{Q_{MR}^{\text{核心能量}}}^K \rightsquigarrow S_K^{-1} \left(\sum_{K \geq 3} ctg^s \left(\sum_{\rho=2}^m \rho_\theta \cdot \frac{\theta_{\rho(t')}}{2} \right)^{Q_{MR}^{\text{核心能量}}} \right) \wedge S_K^{-1} \left(\sum_{K \geq 3} ctg^s \left(\sum_{\rho=2}^m \rho_\beta \cdot \frac{\beta_{\rho(t')}}{2} \right)^{Q_{MR}^{\text{核心能量}}} \right) , \text{ and } (S_K^{-1})^K \langle \theta, \beta \rangle^K \simeq (S_K^{-1} \langle \theta, \beta \rangle)^K$$

$$(S_K^{-1} \langle \theta, \beta \rangle)_{Q_{MR}^{\text{核心能量}}}^K \rightsquigarrow S_K^{-1} \left(\sum_{K \geq 3} ctg^s \left(\sum_{\rho=2}^m \rho_\theta \cdot \frac{\theta_{\rho(t')}}{2} \right)^{Q_{MR}^{\text{核心能量}}} \right) \wedge S_K^{-1} \left(\sum_{K \geq 3} ctg^s \left(\sum_{\rho=2}^m \rho_\beta \cdot \frac{\beta_{\rho(t')}}{2} \right)^{Q_{MR}^{\text{核心能量}}} \right) \quad (25)$$

$$Q_E^2(\rho_{(\theta, \beta)}(t')) \sim \langle \sin \left(\frac{1}{T_1} \cdot \sum_{K=3}^m \rho_\theta^s \cdot \frac{\theta_{\rho(t)}}{2} \right) \wedge \cos \left(\frac{1}{T_2} \cdot \sum_{K=3}^m \rho_\beta^s \cdot \frac{\beta_{\rho(t)}}{2} \right) \rangle_{a_{nn}^{11}}^{\langle i\omega, i\omega-1 \rangle} , \text{ and}$$

$$Q_E^2(\rho_{(\theta, \beta)}(t')) \sim \sum_{K \geq 3} ctg^s \left(\sum_{\rho=2}^m \rho_{(\theta, \beta)} \cdot \frac{\langle \theta, \beta \rangle_{\rho(t')}}{2} \right)_{E_X(t')}^{Q_{MR}} , \therefore$$

$$\sum_{K \geq 3} ctg^s \left(\sum_{\rho=2}^m \rho_{\theta^*} \cdot \frac{\theta_{\rho(t')}}{2} \right)_{E_X(t')}^{Q_{MR}} \rightsquigarrow \langle \sin \left(\frac{1}{T_1} \cdot \sum_{\rho=3}^m \rho_\theta \cdot \frac{\theta_{\rho(t)}}{2} \right) \wedge \cos \left(\frac{1}{T_2} \cdot \sum_{\rho=3}^m \rho_\beta \cdot \frac{\beta_{\rho(t)}}{2} \right) \rangle_{a_{nn}^{11}}^{\langle i\omega, i\omega-1 \rangle} , \text{ and if } \theta^* \sim \xi \text{ then}$$

$$\sum_{K \geq 3} ctg^s \left(\sum_{\rho=2}^m \rho_\xi \cdot \frac{\xi_{\rho(t')}}{2} \right)_{E_X(t')}^{Q_{MR}} \rightsquigarrow \langle \sin \left(\frac{1}{T_1} \cdot \sum_{\rho=3}^m \rho_\theta \cdot \frac{\theta_{\rho(t)}}{2} \right) \wedge \cos \left(\frac{1}{T_2} \cdot \sum_{\rho=3}^m \rho_\beta \cdot \frac{\beta_{\rho(t)}}{2} \right) \rangle_{a_{nn}^{11}}^{\langle i\omega, i\omega-1 \rangle} \quad (26)$$

.类脑(脑) 眼睛感知影像相当于 $MR^{H_{ij}Q_i H_{ji}^H}$, 投影于对偶密钥群高一维密钥表 Ω^{K+1}

$$\langle \cos^{2n} \left(\begin{smallmatrix} 1 & 0 \\ 0 & 1 \end{smallmatrix} T^{-1} \cdot \sum_{s=3}^m \rho_{\beta^s} \cdot \frac{\beta_{\rho(t)}}{2} \right) \rangle_{a_{nn}^{11}}^{\langle i\omega, i\omega-1 \rangle} , \text{ and } s=2, \omega-1, \omega=2.5$$

; 而对偶密钥群核势密码表生成序列

$$\langle \cos \left(T^{-1} \begin{smallmatrix} 1 & 0 \\ 0 & 1 \end{smallmatrix} \cdot \sum_{s=3}^m \beta^s \cdot \frac{\beta_{\rho(t)}}{2} \right) \rangle_{a_{nn}^{11}}^{\langle i\omega, i\omega-1 \rangle} , \text{ and } s=2, \omega-1, \omega=1.5$$

$$\Omega^{K+1}[\langle \theta, \beta \rangle(\rho(t))]_{S_{Left, right}^{m+k-1}}^{Q_{MR}} = \Omega^{K+1} \left[\langle \theta, \beta \rangle \left(\rho_t \left(\sum \frac{\delta}{\omega_i} \times \log |I + R^{-1} \times H_{ij} \times Q_{MR}^{\text{核心能量}} \times H_{ji}^H| \right) \right) \right] , \text{ and } R^{-1} \text{ 干扰信号}$$

.左、右脑(类脑)对偶密钥群分布在携带核心能量的切片丛上, 这种左右脑神经元(密钥群密码的

核势)能量分布

${}^{+}\Omega_{t'(\theta)}^{S_{\partial M}^{-1}}(S_K^{-1}) \wedge {}^{-}\Omega_{t'(\theta)}^{S_{\partial M}^{-1}}(S_K^{-1})$, and S_K^{-1} , 表示切片丛, 也可以变换为

${}^{left}\Omega_{t'(\theta)}^{S_{\partial M}^{-1}}(S_K^{-1}) \wedge {}^{right}\Omega_{t'(\theta)}^{S_{\partial M}^{-1}}(S_K^{-1})$, 而此种 " $\wedge$ " 逻辑群关系的析取, 充分体现左、右脑功能区的明显区别;

当又具有局部的相互联系

$$(S_{\partial M}^{-1}\langle\theta, \beta\rangle)_{Q_{MR}^{核能量}}^K$$

$$\rightsquigarrow \left[S_K^{-1} \left(\sum_{K \geq 3}^m ctg^s \left(\sum_{\rho=2}^m \rho_{\theta} \cdot \frac{\theta_{\rho}(t')}{2} \right)^{Q_{MR}^{核能量}} \right) \wedge S_K^{-1} \left(\sum_{K \geq 3}^m ctg^s \left(\sum_{\rho=2}^m \rho_{\beta} \cdot \frac{\beta_{\rho}(t')}{2} \right)^{Q_{MR}^{核能量}} \right) \right]$$

上式为切片丛[携带核心能量]

$$\text{密钥群: } {}^{+}\Omega_{t'(\theta)}^{S_{\partial M}^{-1}}(S_K^{-1}(\rho_{\theta}(t'))) \wedge {}^{-}\Omega_{t'(\theta)}^{S_{\partial M}^{-1}}(S_K^{-1}(\rho_{\theta}(t'))), \text{ and } Q_E^2(\rho_{(\theta, \beta)}(t')) \rightsquigarrow \rho_{\theta}(t'(Q_E))$$

$$\Omega_{t'(\theta, \beta)}^{+\wedge-(S_{\partial M}^{-1})} \simeq {}^{+}\Omega_{t'(\theta)}^{S_{\partial M}^{-1}}(S_K^{-1}(\rho_{\theta}(t'))) \wedge {}^{-}\Omega_{t'(\theta)}^{S_{\partial M}^{-1}}(S_K^{-1}(\rho_{\theta}(t'))), \text{ and}$$

$${}^{+}\Omega_{t'(\theta)}^{S_{\partial M}^{-1}}(S_K^{-1}(\rho_{\theta}(t'))) \wedge {}^{-}\Omega_{t'(\theta)}^{S_{\partial M}^{-1}}(S_K^{-1}(\rho_{\theta}(t')))$$

$$\sim \left[\Omega_{t'(\theta)}^{S_{\partial M}^{-1}} \left(S_K^{-1} \left(\sum_{K \geq 3}^m ctg^s \left(\sum_{\rho=2}^m \rho_{\theta} \cdot \frac{\theta_{\rho}(t')}{2} \right)^{Q_E} \right) \right) \wedge \Omega_{t'(\beta)}^{S_{\partial M}^{-1}} \left(S_K^{-1} \left(\sum_{K \geq 3}^m ctg^s \left(\sum_{\rho=2}^m \rho_{\beta} \cdot \frac{\beta_{\rho}(t')}{2} \right)^{Q_E} \right) \right) \right] \quad (27)$$

$$\Omega_{t'(\theta, \beta)}^{+\wedge-(S_{\partial M}^{-1})} \sim [S_{\partial M}^{-1}\langle\theta, \beta\rangle]_{Q_{MR}^{核能量}}^K \text{ or } [S_{\partial M}^{-1}\langle\theta, \beta\rangle]_{Q_{MR}^{核能量}}^K \sim {}^{+}\Omega_{t'(\theta)}^{S_{\partial M}^{-1}}(S_K^{-1}(\rho_{\theta}(t'))) \wedge {}^{-}\Omega_{t'(\theta)}^{S_{\partial M}^{-1}}(S_K^{-1}(\rho_{\theta}(t')))$$

$$\text{密钥群: } \left[\begin{array}{c} \Sigma \\ S_{\partial M}^{-1}\langle\theta, \beta\rangle \end{array} \right]_{Q_{MR}^{核能量}}^K \sim \Omega_{t'(\theta, \beta)}^{+\wedge-(S_{\partial M}^{-1})}$$

. 对偶密钥群核势[密码表]生成序列, 至对偶密钥群高一维密钥表容器

$$\Omega^{K+1}[\langle\theta, \beta\rangle(\rho(t))]_{S_{Left, right}^{m+k-1}} = S_{Left, right}^{m+k-1} \left[{}^{+}\Omega_{t'(\theta)}^{S_{\partial M}^{-1}}(S_K^{-1}(\rho_{\theta}(t'))) \wedge {}^{-}\Omega_{t'(\beta)}^{S_{\partial M}^{-1}}(S_K^{-1}(\rho_{\beta}(t')))) \right]$$

$$\Omega^{K+1}[\langle\theta, \beta\rangle(\rho(t))]_{S_{Left, right}^{m+k-1}} = S_{Left, right}^{m+k-1} \left[\left[\begin{array}{c} \Sigma \\ S_{\partial M}^{-1}\langle\theta, \beta\rangle \end{array} \right]_{Q_{MR}^{核能量}}^K \right]$$

上式表明密钥群高一维密钥表容器, 可以通过超曲面与余切超曲面的融合形成对偶密钥群核势凸核[密码群]生成序列的容器。如果上式的 " $\wedge$ " 析取变换为 " $\vee$ ", 则将形成高维对偶密钥群核势的初始化结构形态的演化。

$$S_{Left, right}^{m+k-1} \left[{}^{+\wedge-}\Omega_t^{(S_{\partial M}^{-1})} \left(S_K^{-1} \left(\rho_{\theta} (t') \right) \right) \wedge {}^{-}\Omega_t^{(S_{\partial M}^{-1})} \left(S_K^{-1} \left(\rho_{\beta} (t') \right) \right) \right] \rightsquigarrow \left[\langle \theta, \beta \rangle \Omega_{Q_E^2 \wedge \rho_{(\theta, \beta)}(t')}^{i\omega}, \langle \theta, \beta \rangle \Omega_{Q_E^2 \wedge \rho_{(\theta, \beta)}(t')}^{i\omega-1} \right]_{S_K^{-1}}, \ddots$$

$$S_{Left, right}^{m+k-1} \left[\Omega_t^{+\wedge- (S_{\partial M}^{-1})} \left(S_K^{-1} \left(\rho_{\langle \theta, \beta \rangle}(t') \right) \right) \right]$$

$$\rightsquigarrow \left[\langle \sin \left(T^{-1} \begin{vmatrix} 1 & 0 \\ 0 & 1 \end{vmatrix} \cdot \sum_{s=3}^m \theta^s \cdot \frac{\theta_{\rho(t)}^{s-1}}{2} \right) \vee \cos \left(T^{-1} \begin{vmatrix} 0 & 1 \\ 1 & 0 \end{vmatrix} \cdot \sum_{s=3}^m \beta^s \cdot \frac{\beta_{\rho(t)}^{s-1}}{2} \right) \rangle_{a_{mm}^{11}} \right]^\Sigma$$

上式为对偶密钥群核势凸核[密钥群]生成序列

$$S_{Left, right}^{m+k-1} \left[{}^{+\wedge-}\Omega_t^{(S_{\partial M}^{-1})} \left(S_K^{-1} \left(\rho_{\langle \theta, \beta \rangle}(t') \right) \right) \right]$$

$$\rightsquigarrow \Omega^{K+1} \left[\langle \theta, \beta \rangle \left(\rho_t \left(\sum \frac{\delta}{\omega_i} \times \log |I + R^{-1} \times H_{ij} \times Q_{MR}^{\text{核心能量}} \times H_{ji}^H| \right) \right) \right], \text{ and } R^{-1} \text{ 干扰信号}$$

$$\Omega^{K+1} [\langle \theta, \beta \rangle (\rho(t))]_{S_{Left, right}^{m+k-1}}^{Q_{MR}} = \Omega^{K+1} \left[\langle \theta, \beta \rangle \left(\rho_t \left(\sum \frac{\delta}{\omega_i} \times \log |I + R^{-1} \times H_{ij} \times Q_{MR}^{\text{核心能量}} \times H_{ji}^H| \right) \right) \right], \text{ and } R^{-1} \text{ 干扰信号}$$

.对偶密钥群生成序列，存在密钥群和密钥群对偶[锁]的生成式人工智能

$$S_{Left, right}^{m+k-1} \left[{}^{+\wedge-}\Omega_t^{(S_{\partial M}^{-1})} \left(S_K^{-1} \left(\rho_{\langle \theta, \beta \rangle}(t') \right) \right) \right], \text{ 密钥群生成序列}$$

上式为密钥群对偶生成式群表结构群。而类脑(脑)眼感知影像 $MR^{H_{ij} Q_i H_{ji}^H}$ ，投影于对偶密钥群高一维密钥表 Ω^{K+1} ，并携带能量通讯信号。所以对偶密钥群生成序列为感知影像投影于超空间的超曲面上能量通信信号，其核心信号 $\Omega^{K+1} \left(MR^{H_{ij} Q_i H_{ji}^H} \right)$ or $\Omega^{K+1} \left(Brain^{H_{ij} Q_i H_{ji}^H} \right)$

$$\Omega^{K+1} [\langle \theta, \beta \rangle (\rho(t))]_{S_{Left, right}^{m+k-1}}^{Q_{MR}} = S_{Left, right}^{m+k-1} \left[{}^{+\wedge-}\Omega_t^{(S_{\partial M}^{-1})} \left(S_K^{-1} \left(\rho_{\langle \theta, \beta \rangle}(t') \right) \right) \right]$$

$$S_{Left, right}^{m+k-1} \left[{}^{+\wedge-}\Omega_t^{(S_{\partial M}^{-1})} \left(MR^{H_{ij} Q_i H_{ji}^H} \right) \right] \rightsquigarrow \Omega^{K+1} \left[MR^{H_{ij} Q_i H_{ji}^H} \right]$$

.投影切片 $S_K^{-1} \left(MR^{H_{ij} Q_i H_{ji}^H} \right)$ or $S_K^{-1} \left(Brain^{H_{ij} Q_i H_{ji}^H} \right)$ 是高维超空间的余切曲面对偶密钥群生成序列，即携带能量感知影像投影，它的本质感知影像的能量波动分布。而若需要翻译成可以认知信息体系，则通过下式

$$S_{Left, right}^{m+k-1} \left[{}^{+\wedge-}\Omega_t^{(S_{\partial M}^{-1})} \left(S_K^{-1} \left(\rho_{\langle \theta, \beta \rangle}(t') \right) \right) \right] \rightsquigarrow S_{Left, right}^{m+k-1} \left[{}^{+\vee-}\Omega_t^{(S_{\partial M}^{-1})} \left(S_K^{-1} \left(\rho_{\langle \theta, \beta \rangle}(t') \right) \right) \right]$$

上式是将右侧能量波动信号，转换左侧数字信号，即人类可认知的知识体系。

$$S_{Left, right}^{m+k-1} \left[{}^{+\vee-}\Omega_t^{(S_{\partial M}^{-1})} \left(S_K^{-1} \left(\rho_{\langle \theta, \beta \rangle}(t') \right) \right) \right] \leftarrow \Omega^{K+1} \left[\langle \theta, \beta \rangle \left(\rho_t \left(\sum \frac{\delta}{\omega_i} \times \log |I + R^{-1} \times H_{ij} \times Q_{MR}^{\text{核心能量}} \times H_{ji}^H| \right) \right) \right]$$

$$\begin{aligned}
& S_{Left, right}^{m+k-1} \left[{}^{+}\Omega_{t'(\theta)}^{(S_{\partial M}^{-1})} \left(S_K^{-1} \left(\rho_{\theta}(t') \right) \right) \vee {}^{-}\Omega_{t'(\beta)}^{(S_{\partial M}^{-1})} \left(S_K^{-1} \left(\rho_{\beta}(t') \right) \right) \right] \\
& \quad \Leftarrow \Omega^{k+1} \left[\langle \theta, \beta \rangle \left(\rho_t \left(\sum \frac{\delta}{\omega_i} \times \log \left| I + R^{-1} \times H_{ij} \times Q_{MR}^{\text{核心能量}} \times H_{ji}^H \right| \right) \right) \right] \\
& \left[{}^{+}\Omega_t^{(S_{\partial M}^{-1})} \left(S_K^{-1} \left(\sum_{K \geq 3}^m ctg^s \left(\sum_{\rho=2}^m \rho_{\theta} \cdot \frac{\theta_{\rho}(t')}{2} \right)^{Q_E} \right) \right) \vee {}^{-}\Omega_t^{(S_{\partial M}^{-1})} \left(S_K^{-1} \left(\sum_{K \geq 3}^m ctg^s \left(\sum_{\rho=2}^m \rho_{\beta} \cdot \frac{\beta_{\rho}(t')}{2} \right)^{Q_E} \right) \right) \right] \xleftarrow{\text{服从(属于)}} \\
& \Omega^{k+1} \left[\langle \theta, \beta \rangle \left(\rho_t \left(\sum \frac{\delta}{\omega_i} \times \log \left| I + R^{-1} \times H_{ij} \times Q_{MR}^{\text{核心能量}} \times H_{ji}^H \right| \right) \right) \right], \text{ and if } Q_{MR}^{\text{核心能量}} \\
& \quad = \text{Matrix} \begin{bmatrix} E_{X_E}^K \otimes X_K^H & & \\ & E_{X_S}^K \otimes X_K^H & \\ & & E_{X_M}^K \otimes X_K^H \end{bmatrix}_i^Q, R^{-1} \text{ 干扰信号} \\
& \Omega_{Q_E^2(\rho_{(\theta, \beta)}(t'))_t^{\pm \frac{\pi}{2} + n\pi}}^{(i\omega, i\omega-1)} \rightsquigarrow \langle \frac{1}{t_1} \cdot \sum_{s=3}^m \rho_{\theta}^s \cdot \frac{\theta_{\rho(t)}}{2}, \frac{1}{t_2} \cdot \frac{1}{t_2} \cdot \sum_{s=3}^m \rho_{\beta}^s \cdot \frac{\beta_{\rho(t)}}{2} \rangle_{\langle \sin, \cos \rangle}^{(i\omega, i\omega-1)} \\
& \Sigma \forall \Omega_{Q_E^2(\rho_{(\theta, \beta)}(t'))_t^{\pm \frac{\pi}{2} + n\pi}}^{(i\omega, i\omega-1)} \rightsquigarrow \left[S_K^{-1} \left(\sum_{K \geq 3}^m ctg^s \left(\sum_{\rho=2}^m \rho_{\theta} \cdot \frac{\theta_{\rho}(t')}{2} \right)^{Q_E} \right) \vee S_K^{-1} \left(\sum_{K \geq 3}^m ctg^s \left(\sum_{\rho=2}^m \rho_{\beta} \cdot \frac{\beta_{\rho}(t')}{2} \right)^{Q_E} \right) \right] \\
& \left[\langle \sin \left(T^{-1} \begin{vmatrix} 1 & 0 \\ 0 & 1 \end{vmatrix} \cdot \sum_{s=3}^m \theta^s \cdot \frac{\theta_{\rho(t)}}{2} \right) \vee \cos \left(T^{-1} \begin{vmatrix} 0 & 1 \\ 1 & 0 \end{vmatrix} \cdot \sum_{s=3}^m \beta^s \cdot \frac{\beta_{\rho(t)}}{2} \right) \rangle_{a_{mm}^{\uparrow \downarrow}}^{(i\omega, i\omega-1)} \right]^{\Sigma} \\
& \rightsquigarrow \left[S_K^{-1} \left(\sum_{K \geq 3}^m ctg^s \left(\sum_{\rho=2}^m \rho_{\theta} \cdot \frac{\theta_{\rho}(t')}{2} \right)^{Q_E} \right) \vee S_K^{-1} \left(\sum_{K \geq 3}^m ctg^s \left(\sum_{\rho=2}^m \rho_{\beta} \cdot \frac{\beta_{\rho}(t')}{2} \right)^{Q_E} \right) \right], \therefore \\
& {}^{+}\vee {}^{-}\Omega_t^{(S_{\partial M}^{-1})} \left[S_K^{-1} \left(\sum_{K \geq 3}^m ctg^s \left(\sum_{\rho=2}^m \rho_{\theta} \cdot \frac{\theta_{\rho}(t')}{2} \right) \right) \vee S_K^{-1} \left(\sum_{K \geq 3}^m ctg^s \left(\sum_{\rho=2}^m \rho_{\beta} \cdot \frac{\beta_{\rho}(t')}{2} \right) \right) \right]^{Q_E} \xleftarrow{\text{解译}} \\
& \left[\langle \sin \left(T^{-1} \begin{vmatrix} 1 & 0 \\ 0 & 1 \end{vmatrix} \cdot \sum_{s=3}^m \theta^s \cdot \frac{\theta_{\rho(t)}}{2} \right) \vee \cos \left(T^{-1} \begin{vmatrix} 0 & 1 \\ 1 & 0 \end{vmatrix} \cdot \sum_{s=3}^m \beta^s \cdot \frac{\beta_{\rho(t)}}{2} \right) \rangle_{a_{mm}^{\uparrow \downarrow}}^{(i\omega, i\omega-1)} \right]^{\Sigma}
\end{aligned}$$

上式为密钥群[对偶]的解译密码(核势凸核)的生成序列。

$$\Omega_{Q_E^2(\rho_{(\theta, \beta)}(t'))_t^{\pm \frac{\pi}{2} + n\pi}}^{(i\omega, i\omega-1)} \cdot a_{nn}^{\uparrow \downarrow} \rightsquigarrow \langle \frac{1}{t_1} \cdot \sum_{s=3}^m \rho_{\theta}^s \cdot \frac{\theta_{\rho(t)}}{2}, \frac{1}{t_2} \cdot \frac{1}{t_2} \cdot \sum_{s=3}^m \rho_{\beta}^s \cdot \frac{\beta_{\rho(t)}}{2} \rangle_{\langle \sin, \cos \rangle}^{(i\omega, i\omega-1)} \cdot a_{mm}^{\uparrow \downarrow}$$

解译的信息隐含在类脑(脑)切片丛中, 即对偶密钥群核势(凸核)的生成序列

$$\left\{ \begin{array}{l} S_K^{-1} \left(\sum_{K \geq 3}^m ctg^s \left(\sum_{\rho=2}^m \rho_{\theta} \cdot \frac{\theta_{\rho(t')}}{2} \right)^{Q_E} \right) \xrightarrow{\text{解译}} \sin^{(i\omega, i\omega-1)} \langle T^{-1} \begin{vmatrix} 1 & 0 \\ 0 & 1 \end{vmatrix} \cdot \sum_{s=3}^m \theta^s \cdot \frac{\theta_{\rho(t)}}{2} \rangle_{a_{mm}^{\uparrow l}}, \text{ and } T^{-1} \begin{vmatrix} 1 & 0 \\ 0 & 1 \end{vmatrix} \sim T^{-1} \begin{vmatrix} 0 & 1 \\ 1 & 0 \end{vmatrix} \\ S_K^{-1} \left(\sum_{K \geq 3}^m ctg^s \left(\sum_{\rho=2}^m \rho_{\beta} \cdot \frac{\beta_{\rho(t')}}{2} \right)^{Q_E} \right) \xrightarrow{\text{解译}} \cos^{(i\omega, i\omega-1)} \langle T^{-1} \begin{vmatrix} 0 & 1 \\ 1 & 0 \end{vmatrix} \cdot \sum_{s=3}^m \beta^s \cdot \frac{\beta_{\rho(t)}}{2} \rangle_{a_{mm}^{\uparrow l}}, \text{ and } T^{-1} \begin{vmatrix} 0 & 1 \\ 1 & 0 \end{vmatrix} \sim T^{-1} \begin{vmatrix} 1 & 0 \\ 0 & 1 \end{vmatrix} \end{array} \right.$$

, $\rho_{\theta} \sim \theta^s, \rho_{\beta} \sim \beta^s$ then 上式可以改写为

$$\left\{ \begin{array}{l} S_K^{-1} \left(\sum_{K \geq 3}^m \frac{\cos^s \left(\sum_{\rho=2}^m \rho_{\theta} \cdot \frac{\theta_{\rho(t')}}{2} \right)}{\sin^s \left(\sum_{\rho=2}^m \rho_{\theta} \cdot \frac{\theta_{\rho(t')}}{2} \right)} \right)^{Q_E} \xrightarrow{\text{解译}} \sin^{(i\omega, i\omega-1)} \langle \sum_{s=3}^m \theta^s \cdot \frac{\theta_{\rho(t)}}{2} \cdot T^{-1} \begin{vmatrix} 1 & 0 \\ 0 & 1 \end{vmatrix} \rangle_{a_{mm}^{\uparrow l}} \\ S_K^{-1} \left(\sum_{K \geq 3}^m \frac{\cos^s \left(\sum_{\rho=2}^m \rho_{\beta} \cdot \frac{\beta_{\rho(t')}}{2} \right)}{\sin^s \left(\sum_{\rho=2}^m \rho_{\beta} \cdot \frac{\beta_{\rho(t')}}{2} \right)} \right)^{Q_E} \xrightarrow{\text{解译}} \cos^{(i\omega, i\omega-1)} \langle \sum_{s=3}^m \beta^s \cdot \frac{\beta_{\rho(t)}}{2} \cdot T^{-1} \begin{vmatrix} 0 & 1 \\ 1 & 0 \end{vmatrix} \rangle_{a_{mm}^{\uparrow l}} \end{array} \right.$$

, and $T^{-1} \begin{vmatrix} 1 & 0 \\ 0 & 1 \end{vmatrix} \sim T^{-1} \begin{vmatrix} 0 & 1 \\ 1 & 0 \end{vmatrix}$, or $T^{-1} \begin{vmatrix} 0 & 1 \\ 1 & 0 \end{vmatrix} \sim T^{-1} \begin{vmatrix} 1 & 0 \\ 0 & 1 \end{vmatrix}$

$$\left\{ \begin{array}{l} S_K^{-1} \left(\sum_{K \geq 3}^m \frac{\cos^s \left(\sum_{s=2}^m \theta \cdot \frac{\theta_{\rho(t')}}{2} \right)}{\sin^s \left(\sum_{s=2}^m \theta \cdot \frac{\theta_{\rho(t')}}{2} \right)} \right)^{Q_E} \xrightarrow{\text{解译}} \sin^{(i\omega, i\omega-1)} \langle \sum_{s=3}^m \theta^s \cdot \frac{\theta_{\rho(t)}}{2} \cdot \langle T^{-1} \begin{vmatrix} 1 & 0 \\ 0 & 1 \end{vmatrix}, T^{-1} \begin{vmatrix} 0 & 1 \\ 1 & 0 \end{vmatrix} \rangle \rangle_{a_{mm}^{\uparrow l}} \\ S_K^{-1} \left(\sum_{K \geq 3}^m \frac{\cos^s \left(\sum_{s=2}^m \beta \cdot \frac{\beta_{\rho(t')}}{2} \right)}{\sin^s \left(\sum_{s=2}^m \beta \cdot \frac{\beta_{\rho(t')}}{2} \right)} \right)^{Q_E} \xrightarrow{\text{解译}} \cos^{(i\omega, i\omega-1)} \langle \sum_{s=3}^m \beta^s \cdot \frac{\beta_{\rho(t)}}{2} \cdot \langle T^{-1} \begin{vmatrix} 1 & 0 \\ 0 & 1 \end{vmatrix}, T^{-1} \begin{vmatrix} 0 & 1 \\ 1 & 0 \end{vmatrix} \rangle \rangle_{a_{mm}^{\uparrow l}} \end{array} \right.$$

以上对偶密钥群核势(凸核)生成序列解译类脑(脑)切片丛中可认知的信息体系。

重构类脑神经网络的对偶密钥群[核势]生成序列的数模基础

$$\cos^{(i\omega, i\omega-1)} \langle \sum_{s=3}^m \beta^s \cdot \frac{\beta_{\rho(t)}}{2} \cdot T^{-1} \begin{vmatrix} 0 & 1 \\ 1 & 0 \end{vmatrix} \rangle_{a_{mm}^{\uparrow l}} \text{ and } \langle \sin \left(T^{-1} \begin{vmatrix} 1 & 0 \\ 0 & 1 \end{vmatrix} \cdot \sum_{s=3}^m \theta^s \cdot \frac{\theta_{\rho(t)}}{2} \right) \vee \cos \left(T^{-1} \begin{vmatrix} 0 & 1 \\ 1 & 0 \end{vmatrix} \cdot \sum_{s=3}^m \beta^s \cdot \frac{\beta_{\rho(t)}}{2} \right) \rangle_{a_{mm}^{\uparrow l}}^{(i\omega, i\omega-1)}$$

类似移动通讯数据分布的数模，其中存在类脑神经网络受损后如何恢复局部记忆信息，即使用备份(或移位、梯度)函数变形

$$\langle \sin^{(i\omega \text{ or } i\omega-1)} \left(T^{-1} \begin{vmatrix} 1 & 0 \\ 0 & 1 \end{vmatrix} \cdot \sum_{s=3}^m \theta^s \cdot \frac{\theta_{\rho(t)}}{2} \right) \rangle_{a_{mm}^{\uparrow l}}^{\nabla(\omega, T)} \rightsquigarrow \langle \cos^{(i\omega \text{ or } i\omega-1)} \left(T^{-1} \begin{vmatrix} 0 & 1 \\ 1 & 0 \end{vmatrix} \cdot \sum_{s=3}^m \theta^s \cdot \frac{\theta_{\rho(t)}}{2} \right) \rangle_{a_{mm}^{\uparrow l}}, \text{ and } \nabla(\omega, T)$$

为随机梯度与滑动方向矢量，则有

$$\langle \sin^{i\omega} \left(T^{-1} \begin{vmatrix} 1 & 0 \\ 0 & 1 \end{vmatrix} \cdot \sum_{s=3}^m \theta^s \cdot \frac{\theta_{\rho(t)}^{s-1}}{2} \right) \rangle^{\nabla(\omega, T)} \rightsquigarrow \langle \cos^{i\omega \text{ or } i\omega-1} \left(T^{-1} \begin{vmatrix} 0 & 1 \\ 1 & 0 \end{vmatrix} \cdot \sum_{s=3}^m \theta^s \cdot \frac{\theta_{\rho(t)}^{s-1}}{2} \right) \rangle$$

上式结果右侧为对偶密钥群核势(凸核)生成序列；而左侧为对偶密钥群的卷积核(携带方向矢量)，此过程成功拟合类脑神经(元)网络受损的重构形态模型。而卷积核随机滑动方向梯度是类脑(脑)增强思维至极限[矢量接近塌陷]时，会引发对偶密钥群核势的重建；所以类脑(脑)受损在恢复记忆时需要到熟悉场景进行增强思维(回忆)；同时形成两套核心公式

$$\begin{aligned} \langle \sin^{i\omega} \left(T^{-1} \begin{vmatrix} 1 & 0 \\ 0 & 1 \end{vmatrix} \cdot \sum_{s=3}^m \theta^s \cdot \frac{\theta_{\rho(t)}^{s-1}}{2} \right) \rangle_{a_{nn}^{\uparrow\downarrow}}^{\nabla(\omega, T)} \\ \rightsquigarrow \langle \sin^{i\omega_*} \left(T^{-1} \begin{vmatrix} 1 & 0 \\ 0 & 1 \end{vmatrix} \cdot \sum_{s=3}^m \theta^s \cdot \frac{\theta_{\rho(t)}^{s-1}}{2} \right) \vee \cos^{i\omega-1} \left(T^{-1} \begin{vmatrix} 0 & 1 \\ 1 & 0 \end{vmatrix} \cdot \sum_{s=3}^m \beta^s \cdot \frac{\beta_{\rho(t)}^{s-1}}{2} \right) \rangle_{a_{mm}^{\uparrow\downarrow}} \quad (28) \end{aligned}$$

$$\begin{aligned} \langle \sin^{i\omega} \left(T^{-1} \begin{vmatrix} 1 & 0 \\ 0 & 1 \end{vmatrix} \cdot \sum_{s=3}^m \theta^s \cdot \frac{\theta_{\rho(t)}^{s-1}}{2} \right) \rangle_{a_{nn}^{\uparrow\downarrow}}^{\nabla(\omega, T)} \\ \rightsquigarrow \langle \sin^{i\omega_*} \left(T^{-1} \begin{vmatrix} 1 & 0 \\ 0 & 1 \end{vmatrix} \cdot \sum_{s=3}^m \theta^s \cdot \frac{\theta_{\rho(t)}^{s-1}}{2} \right) \text{ or } \cos^{i\omega-1} \left(T^{-1} \begin{vmatrix} 0 & 1 \\ 1 & 0 \end{vmatrix} \cdot \sum_{s=3}^m \beta^s \cdot \frac{\beta_{\rho(t)}^{s-1}}{2} \right) \rangle_{a_{nn}^{\uparrow\downarrow}} \quad (29) \end{aligned}$$

而类脑(脑)受损恢复记忆过程中能量随思维增强而增强。

$$Q_E^2(\rho_{(\theta, \beta)}(t')) \sim \langle \cos^{i\omega_*-1} \left(T^{-1} \begin{vmatrix} 1 & 0 \\ 0 & 1 \end{vmatrix} \cdot \sum_{s=3}^m \theta^s \cdot \frac{\theta_{\rho(t)}^{s-1}}{2} \right) \vee \cos^{i\omega-1} \left(T^{-1} \begin{vmatrix} 0 & 1 \\ 1 & 0 \end{vmatrix} \cdot \sum_{s=3}^m \beta^s \cdot \frac{\beta_{\rho(t)}^{s-1}}{2} \right) \rangle$$

$$\Omega_{Q_E^2(\rho_{(\theta, \beta)}(t'))_t}^{(i\omega, i\omega-1) \pm \frac{\pi}{2} + nk\pi} \rightsquigarrow \langle \cos \left(T^{-1} \begin{vmatrix} 1 & 0 \\ 0 & 1 \end{vmatrix} \cdot \sum_{s=3}^m \theta^s \cdot \frac{\theta_{\rho(t)}^{s-1}}{2} \right) \vee \cos \left(T^{-1} \begin{vmatrix} 0 & 1 \\ 1 & 0 \end{vmatrix} \cdot \sum_{s=3}^m \beta^s \cdot \frac{\beta_{\rho(t)}^{s-1}}{2} \right) \rangle_{S_K^{-1}}^{(i\omega, i\omega-1)}, \text{ and}$$

$$\Omega_{Q_E^2(\rho_{(\theta, \beta)}(t'))_t}^{(i\omega, i\omega-1) \pm \frac{\pi}{2} + nk\pi} \rightsquigarrow S_K^{-1} \left\langle \sum_{K \geq 3} \frac{\cos \left(T^{-1} \begin{vmatrix} 1 & 0 \\ 0 & 1 \end{vmatrix} \cdot \sum_{s=3}^m \theta^s \cdot \frac{\theta_{\rho(t)}^{s-1}}{2} \right)}{\sin \left(T^{-1} \begin{vmatrix} 0 & 1 \\ 1 & 0 \end{vmatrix} \cdot \sum_{s=3}^m \beta^s \cdot \frac{\beta_{\rho(t)}^{s-1}}{2} \right)} \right\rangle_{(i\omega, i\omega-1)}, \text{ and if } \theta^s \sim \beta^s; i\omega, i\omega-1 \rightsquigarrow s \text{ then}$$

$$S_K^{-1} \left(ctg^{(i\omega, i\omega-1)} \left(\sum_{\rho=2}^m \rho_{\theta} \cdot \frac{\theta_{\rho(t')}}{2} \right) \right)^{Q_E} \sim \Omega_{Q_E^2(\rho_{(\theta, \beta)}(t'))_t}^{(i\omega, i\omega-1) \pm \frac{\pi}{2} + nk\pi} \cdot a_{nn}^{\uparrow\downarrow},$$

$$S_K^{-1} \left(\sum_{K \geq 3} ctg^s \left(\sum_{\rho=2}^m \rho_{\theta} \cdot \frac{\theta_{\rho(t')}}{2} \right) \right)^{Q_E} \sim \Omega_{Q_E^2(\rho_{(\theta, \beta)}(t'))_t}^{(i\omega, i\omega-1) \pm \frac{\pi}{2} + nk\pi} \cdot a_{nn}^{\uparrow\downarrow}, \quad \text{则变换公式为}$$

$$\left\{ \begin{aligned} & \Omega_{Q_E^2(\rho_{(\theta, \beta)}(t'))_t}^{(i\omega, i\omega-1) \pm \frac{\pi}{2} + nk\pi} \rightsquigarrow \left[S_K^{-1} \left(ctg^s \left(\sum_{\rho=2}^m \rho_{\theta} \cdot \frac{\theta_{\rho(t')}}{2} \right) \right)^{Q_E} \vee S_K^{-1} \left(ctg^s \left(\sum_{\rho=2}^m \rho_{\beta} \cdot \frac{\beta_{\rho(t')}}{2} \right) \right)^{Q_E} \right]_{\text{正常}}^{\Sigma} \\ & \text{受损} \Omega_{Q_E^2(\rho_{(\theta, \beta)}(t'))_t}^{(i\omega, i\omega-1) \pm \frac{\pi}{2} + nk\pi} \rightsquigarrow \left[S_K^{-1} \left(ctg \left(\sum_{\rho=2}^m \rho_{\theta} \cdot \frac{\theta_{\rho(t')}}{2} \right) \right)^{Q_E} \vee S_K^{-1} \left(ctg \left(\sum_{\rho=2}^m \rho_{\beta} \cdot \frac{\beta_{\rho(t')}}{2} \right) \right)^{Q_E} \right]_{\text{受损}}^{(i\omega, i\omega-1)} \end{aligned} \right. \quad (30)$$

$$\text{受损 } \Omega_{Q_E^2(\rho_{(\theta, \beta)}(t'))_t}^{(i\omega, i\omega-1)} > \Omega_{Q_E^2(\rho_{(\theta, \beta)}(t'))_t}^{(i\omega, i\omega-1)}$$

$$S_K^{-1} \left(\sum_{K \geq 3}^m ctg^s \left(\sum_{\rho=2}^m \rho_{\theta} \cdot \frac{\theta_{\rho(t')}}{2} \right)^{Q_E} \right) < S_K^{-1} \left(ctg \left(\sum_{\rho=2}^m \rho_{\theta}^s \cdot \frac{\theta_{\rho(t)}}{2} \right)^{Q_E} \right)^{i\omega}$$

$$S_K^{-1} \left(\sum_{K \geq 3}^m ctg^s \left(\sum_{\rho=2}^m \rho_{\beta} \cdot \frac{\beta_{\rho(t')}}{2} \right)^{Q_E} \right) < S_K^{-1} \left(ctg \left(\sum_{\rho=2}^m \rho_{\beta}^s \cdot \frac{\beta_{\rho(t)}}{2} \right)^{Q_E} \right)^{i\omega-1}$$

$$\sum_{K \geq 3}^m ctg^s \left(\sum_{\rho=2}^m \rho_{\beta} \cdot \frac{\beta_{\rho(t')}}{2} \right)^{Q_E} < ctg^{i\omega} \left(\sum_{\rho=2}^m \rho_{\theta}^s \cdot \frac{\theta_{\rho(t)}}{2} \right)^{Q_E}, \sum_{K \geq 3}^m ctg^s \left(\sum_{\rho=2}^m \rho_{\beta} \cdot \frac{\beta_{\rho(t')}}{2} \right)^{Q_E} < ctg^{i\omega-1} \left(\sum_{\rho=2}^m \rho_{\beta}^s \cdot \frac{\beta_{\rho(t)}}{2} \right)^{Q_E}, \text{ and if } i\omega \sim s, K=3, s=2 \text{ then}$$

$$ctg \left(\sum_{\rho=2}^m \rho_{\theta} \cdot \frac{\theta_{\rho(t')}}{2} \right)_{Q_E} \leq ctg \left(\sum_{\rho=2}^m \rho_{\theta}^s \cdot \frac{\theta_{\rho(t)}}{2} \right)_{Q_E}, \text{ and if } i\omega \sim s, K=3, s=2; \text{ 同理}$$

$$ctg \left(\sum_{\rho=2}^m \rho_{\beta} \cdot \frac{\beta_{\rho(t')}}{2} \right)_{Q_E} \leq ctg \left(\sum_{\rho=2}^m \rho_{\beta}^s \cdot \frac{\beta_{\rho(t)}}{2} \right)_{Q_E}, \text{ and if } i\omega \sim s, K=3, s=2$$

$$\cdot ctg \left(\sum_{\rho=2}^m \rho_{\theta} \cdot \frac{\theta_{\rho(t')}}{2} \right)_{Q_E}, ctg \left(\sum_{\rho=2}^m \rho_{\beta} \cdot \frac{\beta_{\rho(t')}}{2} \right)_{Q_E} \text{ 为正常神经元能量波动, 而卷积核积分后, 神经元受损}$$

$$\text{后恢复记忆能量随思维增强而增强, 即 } ctg \left(\sum_{\rho=2}^m \rho_{\theta}^s \cdot \frac{\theta_{\rho(t)}}{2} \right)_{Q_E}, ctg \left(\sum_{\rho=2}^m \rho_{\beta}^s \cdot \frac{\beta_{\rho(t)}}{2} \right)_{Q_E}$$

$$\left[S_K^{-1} \left(ctg \left(\sum_{\rho=2}^m \rho_{\theta}^s \cdot \frac{\theta_{\rho(t)}}{2} \right)^{Q_E} \right) \vee S_K^{-1} \left(ctg \left(\sum_{\rho=2}^m \rho_{\beta}^s \cdot \frac{\beta_{\rho(t)}}{2} \right)^{Q_E} \right) \right]_{\text{受损}}$$

$$\geq \left[S_K^{-1} \left(ctg^s \left(\sum_{\rho=2}^m \rho_{\theta} \cdot \frac{\theta_{\rho(t')}}{2} \right)^{Q_E} \right) \vee S_K^{-1} \left(ctg^s \left(\sum_{\rho=2}^m \rho_{\beta} \cdot \frac{\beta_{\rho(t')}}{2} \right)^{Q_E} \right) \right]_{\text{正常}}$$

而且 ctg 函数在 $(k\pi, k\pi + \pi)$ 为递减函数, 所以

$$\left[S_K^{-1} \left(ctg \left(\sum_{\rho=2}^m \rho_{\theta}^s \cdot \frac{\theta_{\rho(t)}}{2} \right)^{Q_E} \right) \vee S_K^{-1} \left(ctg \left(\sum_{\rho=2}^m \rho_{\beta}^s \cdot \frac{\beta_{\rho(t)}}{2} \right)^{Q_E} \right) \right]_{\text{受损}}^{(i\omega, i\omega-1)}$$

$$\geq \left[S_K^{-1} \left(ctg^s \left(\sum_{\rho=2}^m \rho_{\theta} \cdot \frac{\theta_{\rho(t')}}{2} \right)^{Q_E} \right) \vee S_K^{-1} \left(ctg^s \left(\sum_{\rho=2}^m \rho_{\beta} \cdot \frac{\beta_{\rho(t')}}{2} \right)^{Q_E} \right) \right]_{\text{正常}}^{\Sigma}, \text{ and } ctg \text{ 函数在 } (k\pi, k\pi + \pi) \text{ 为递减函数}$$

. 从上述内容可知《RLLM 多模态可预测性思维增强收缩参数群、尺度新一代生成式人工智能重构类脑神经网络 R-KFDNN 与密钥群生成序列》通过对偶密钥群生成序列到对偶密钥群核势生成序列；以及当核势(凸核)受损时，其隐形对偶(备份)密钥群生成序列从：

$$\begin{aligned} & \langle \sin^{i\omega} \left(T^{-1} \begin{vmatrix} 1 & 0 \\ 0 & 1 \end{vmatrix} \cdot \sum_{s=3}^m \theta^s \cdot \frac{\theta_{\rho(t)}^{s-1}}{2} \right) \rangle_{a_{nn}^{11}}^{\nabla(\omega, T)} \\ & \rightsquigarrow \langle \sin^{i\omega_*} \left(T^{-1} \begin{vmatrix} 1 & 0 \\ 0 & 1 \end{vmatrix} \cdot \sum_{s=3}^m \theta^s \cdot \frac{\theta_{\rho(t)}^{s-1}}{2} \right) \text{ or } \cos^{i\omega-1} \left(T^{-1} \begin{vmatrix} 0 & 1 \\ 1 & 0 \end{vmatrix} \cdot \sum_{s=3}^m \beta^s \cdot \frac{\beta_{\rho(t)}^{s-1}}{2} \right) \rangle_{a_{nn}^{11}}, \text{ and } \beta^s \rightsquigarrow \theta^s \end{aligned} \quad (31)$$

存在隐形结构对偶密钥群生成序列，即

$$\begin{aligned} & \langle \sin^{i\omega} \left(T^{-1} \begin{vmatrix} 1 & 0 \\ 0 & 1 \end{vmatrix} \cdot \sum_{s=3}^m \theta^s \cdot \frac{\theta_{\rho(t)}^{s-1}}{2} \right) \rangle_{a_{nn}^{11}}^{\nabla(\omega, T)} \\ & \rightsquigarrow \langle \sin^{i\omega_*} \left(T^{-1} \begin{vmatrix} 1 & 0 \\ 0 & 1 \end{vmatrix} \cdot \sum_{s=3}^m \theta^s \cdot \frac{\theta_{\rho(t)}^{s-1}}{2} \right) \vee \cos^{i\omega-1} \left(T^{-1} \begin{vmatrix} 0 & 1 \\ 1 & 0 \end{vmatrix} \cdot \sum_{s=3}^m \beta^s \cdot \frac{\beta_{\rho(t)}^{s-1}}{2} \right) \rangle_{a_{nn}^{11}}, \text{ and } \beta^s \rightsquigarrow \theta^s \end{aligned} \quad (32)$$

上式中隐形结构对偶密钥群生成序列： $\sin^{i\omega_*} \left(T^{-1} \begin{vmatrix} 1 & 0 \\ 0 & 1 \end{vmatrix} \cdot \sum_{s=3}^m \theta^s \cdot \frac{\theta_{\rho(t)}^{s-1}}{2} \right)$

.思维增强的对偶密钥群生成序列，要让受损类脑(脑)片局部恢复记忆，需要思维(能量)增量形成卷积核，为第一个条件。

思维(能量)增强至塌陷，使方向梯度矢量产生反向操作，即 $T^{-1} \begin{vmatrix} 1 & 0 \\ 0 & 1 \end{vmatrix} \rightsquigarrow T^{-1} \begin{vmatrix} 0 & 1 \\ 1 & 0 \end{vmatrix} \text{ or } T^{-1} \begin{vmatrix} 0 & 1 \\ 1 & 0 \end{vmatrix} \rightsquigarrow$

$T^{-1} \begin{vmatrix} 1 & 0 \\ 0 & 1 \end{vmatrix}$ ；为第 2 个条件；这样就会逐渐形成对偶密钥群核势(凸核)的生成序列，即重构了类脑(脑)神经网络。

$$\begin{cases} \left\{ \text{left}^+ \Omega(S_{\lambda(t, \theta, \beta)}^{-1}) \rightsquigarrow \sin \left[\sum_{s=2}^m \rho_{\theta}^s \cdot \frac{\theta_{\rho(t)}^s}{2} \wedge \sum_{s=2}^m \rho_{\beta}^s \cdot \frac{\beta_{\rho(t)}^s}{2} \right] \right\}^{\omega(t)^{i\omega(\theta)}} \\ \left\{ \text{right}^- \Omega(S_{\lambda(t, \theta, \beta)}^{-1}) \rightsquigarrow \cos \left[\sum_{s=2}^m \rho_{\theta}^s \cdot \frac{\theta_{\rho(t)}^s}{2} \wedge \sum_{s=2}^m \rho_{\beta}^s \cdot \frac{\beta_{\rho(t)}^s}{2} \right] \right\}^{\omega(t)^{i\omega(\theta)}} \end{cases}$$

携带类脑(脑)切片丛能量结构密钥群生成序列的更高维度幂函数复变弦线丛势生成序列，Fig29, Fig30, Fig31；而类脑(脑)受损恢复记忆过程中能量随思维增强。

此式为类脑(脑)左、右脑分离，且每片约化的记忆悬浮

$$\begin{cases} \left\{ \text{left}^+ \Omega(S_{\lambda(t, \theta)}^{-1}) \rightsquigarrow \left[\sin \left(\sum_{i=2}^m \rho_{\theta}^i \cdot \frac{\theta_{\rho(t)}^i}{2} \wedge \sum_{j=2}^m \rho_{\beta}^j \cdot \frac{\beta_{\rho(t)}^j}{2} \right) \right] \right\}^{\omega(t)^{i\omega(\theta)}} \\ \left\{ \text{right}^- \Omega(S_{\lambda(t, \theta)}^{-1}) \rightsquigarrow \left[\cos \left(\sum_{j=2}^p \rho_{\theta}^j \cdot \frac{\theta_{\rho(t)}^j}{2} \wedge \sum_{i=2}^q \rho_{\beta}^i \cdot \frac{\beta_{\rho(t)}^i}{2} \right) \right] \right\}^{\omega(t)^{i\omega(\theta)}} \end{cases} \quad (33)$$

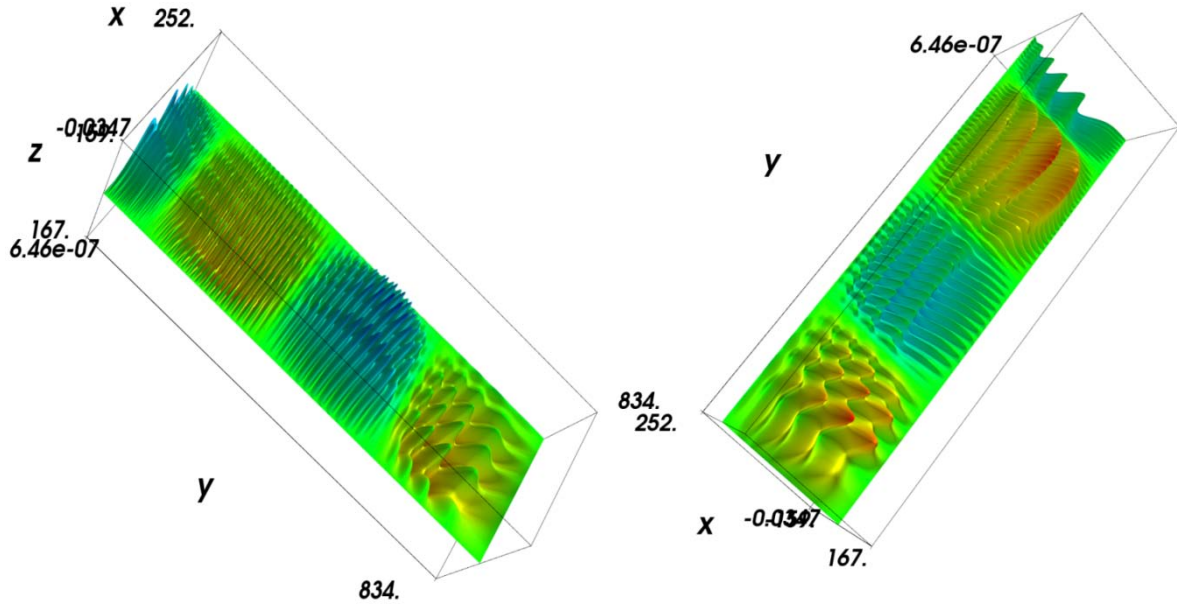


Fig29. RLLM 增强思维能力搜索增强微调收缩参数群尺度_密钥群生成序列的更高维度幂函数为高维度复变弦线丛势生成序列

$$\left\{ \begin{array}{l} \left[\text{left}^+ \Omega(S_{\lambda(t,\theta)}^{-1}) \rightsquigarrow \left[\sin^2 \left(\sum_{i=2}^m \theta^i \cdot \frac{\theta_{\rho(t')^i}}{2} \right) + \cos^2 \left(\sum_{j=2}^m \theta_*^j \cdot \frac{\theta_{\rho(t')^j}}{2} \right) \right]^{\omega(t)^{i\omega(\theta)}} \right. \\ \left. \left[\text{right}^- \Omega(S_{\lambda(t,\theta)}^{-1}) \rightsquigarrow \left[\sin^2 \left(\sum_{i=2}^m \beta^i \cdot \frac{\beta_{\rho(t')^i}}{2} \right) + \cos^2 \left(\sum_{j=2}^m \beta_*^j \cdot \frac{\beta_{\rho(t')^j}}{2} \right) \right]^{\omega(t)^{i\omega(\theta)}} \right] \end{array} \right.$$

根据 $\theta^i \cdot \frac{\theta_{\rho(t')^i}}{2} = 1/t \times \theta_{\rho}^{i-1} \times \theta^i = 1/t \times \theta_{\rho}^{i-1} \times \theta^i = \frac{1}{t} \cdot \theta_{\rho}^i$; 所以上式可以写为

$$\left\{ \begin{array}{l} \left[\text{left}^+ S_{\lambda(t,\theta)}^{-1} \rightsquigarrow \left[\sin^2 \left(\sum_{i=2}^m \frac{1}{t} \cdot \theta_{\rho}^i \right) + \cos^2 \left(\sum_{j=2}^m \frac{1}{t} \cdot \theta_{\rho}^j \right) \right]^{\omega(t)^{i\omega(\theta)}} \right. \\ \left. \left[\text{right}^- S_{\lambda(t,\theta)}^{-1} \rightsquigarrow \left[\sin^2 \left(\sum_{i=2}^m \frac{1}{t} \cdot \beta_{\rho}^i \right) + \cos^2 \left(\sum_{j=2}^m \frac{1}{t} \cdot \beta_{\rho}^j \right) \right]^{\omega(t)^{i\omega(\theta)}} \right] \end{array} \right.$$

. 聚核势生成序列分布在时间 t 切丛上(且在类脑高维空间中) ; 所以也属于弦线丛势生成序列的线性高维线圈。

$$^{+\wedge-} \Omega_{\theta}^{\Sigma_{\theta}^{-1}} \rightsquigarrow \sum_{i=1}^m \langle \text{left}^+ S_{\lambda(t,\theta_i)}^{-1}, \text{right}^- S_{\lambda(t,\theta_i)}^{-1} \rangle$$

$$\int^{+\wedge-} C_{\theta_i}^{\Sigma_{\theta_i}^{-1}} \rightsquigarrow \langle \text{left}^+ S_{\lambda(t,\theta)}^{-1}, \text{right}^- S_{\lambda(t,\theta)}^{-1} \rangle$$

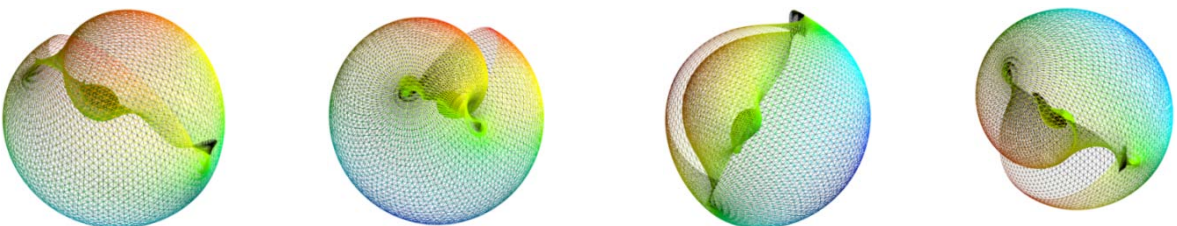


Fig30. RLLM 增强思维能力搜索增强微调 and 收缩参数群尺度_密钥群生成序列在高维类脑空间聚核势生成序列分布在时间 t 切丛;同时也属于弦线丛势生成序列的线性高维线圈

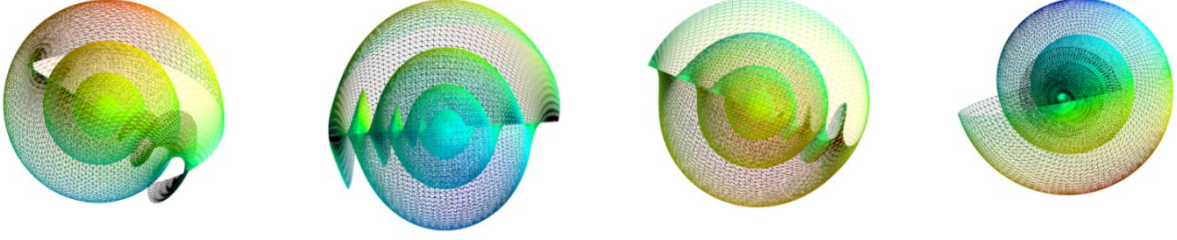


Fig31. RLLM 增强思维能力搜索增强微调 and 收缩参数群尺度_密钥群生成序列在高维类脑空间聚核势生成序列分布在时间 t 切丛;同时也属于弦线丛势生成序列的线性高维线圈

$$\Omega_{Q_E^2(\rho_{(\theta,\beta)}(t'))_t}^{(i\omega, i\omega-1)} \xrightarrow{\pm \frac{\pi}{2} + n\pi} \langle \cos \left(T^{-1} \begin{vmatrix} 1 & 0 \\ 0 & 1 \end{vmatrix} \cdot \sum_{s=3}^m \theta^s \cdot \frac{\theta_{\rho(t)}^{s-1}}{2} \right) \wedge \cos \left(T^{-1} \begin{vmatrix} 0 & 1 \\ 1 & 0 \end{vmatrix} \cdot \sum_{s=3}^m \beta^s \cdot \frac{\beta_{\rho(t)}^{s-1}}{2} \right) \rangle_{S_K^{-1}}^{(i\omega, i\omega-1)}$$

携带类脑(脑)切片丛的对偶密钥群生成序列

$$left, right \Omega(S_{\lambda(t,(\theta,\beta))}^{-1}) \xrightarrow{\pm \frac{\pi}{2} + n\pi} \sin \left[\sum_{s=2}^m \rho_{\theta}^s \cdot \frac{\theta_{\rho(t')}^s}{2} \wedge \sum_{s=2}^m \rho_{\beta}^s \cdot \frac{\beta_{\rho(t')}^s}{2} \right] \vee \cos \left[\sum_{s=2}^m \rho_{\theta}^s \cdot \frac{\theta_{\rho(t')}^s}{2} \wedge \sum_{s=2}^m \rho_{\beta}^s \cdot \frac{\beta_{\rho(t')}^s}{2} \right]^{\omega(t) i\omega(\theta)}$$

对上式进行逻辑与集合属性变换

$$\left[\rho_{\theta}^s \cdot \frac{\theta_{\rho(t')}^s}{2} \right]_{d\sin(\theta_t)} \sim \frac{1}{t_1} \cdot \rho_{\theta}^s \cdot \frac{\theta_{\rho(t')}^{s-1}}{4}, \left[\rho_{\theta_*}^s \cdot \frac{\theta_{\rho(t')}^s}{2} \right]_{d\cos(\theta_t)} \sim \frac{1}{t_2} \cdot \rho_{\theta_*}^s \cdot \frac{\theta_{\rho(t')}^{s-1}}{4}; \text{ and } \frac{1}{t_1 + t_2} \sim \frac{1}{T} \text{ or } -\frac{1}{T}$$

A. 切片丛: 密钥群生成序列幂复变弦线丛势生成序列

$$left, right \Omega(S_{\lambda(t,(\theta,\beta))}^{-1}) \xrightarrow{\pm \frac{\pi}{2} + n\pi} \sin \left[T^{-1} \begin{vmatrix} 1 & 0 \\ 0 & 1 \end{vmatrix} \cdot \sum_{s=2}^m \rho_{\theta}^s \cdot \frac{\theta_{\rho(t')}^s}{2} \right] \wedge \cos \left[T^{-1} \begin{vmatrix} 0 & 1 \\ 1 & 0 \end{vmatrix} \cdot \sum_{s=2}^m \rho_{\beta}^s \cdot \frac{\beta_{\rho(t')}^s}{2} \right]_{S_K^{-1}}^{\omega i\omega(\theta,\beta)}$$

B. 切片丛: 对偶密钥群生成序列

$$\Omega_{Q_E^2(\rho_{(\theta,\beta)}(t'))_t}^{(i\omega, i\omega-1)} \xrightarrow{\pm \frac{\pi}{2} + n\pi} \langle \cos \left(T^{-1} \begin{vmatrix} 1 & 0 \\ 0 & 1 \end{vmatrix} \cdot \sum_{s=3}^m \theta^s \cdot \frac{\theta_{\rho(t)}^{s-1}}{2} \right) \wedge \cos \left(T^{-1} \begin{vmatrix} 0 & 1 \\ 1 & 0 \end{vmatrix} \cdot \sum_{s=3}^m \beta^s \cdot \frac{\beta_{\rho(t)}^{s-1}}{2} \right) \rangle_{S_K^{-1}}^{(i\omega, i\omega-1)}$$

所以 A. 公式, 不等于 B. 公式, 即

$$left, right \Omega(S_{\lambda(t,(\theta,\beta))}^{-1}) \neq \Omega_{Q_E^2(\rho_{(\theta,\beta)}(t'))_t}^{(i\omega, i\omega-1)}, \quad \text{and } i\omega, i\omega - 1 \xrightarrow{\pm \frac{\pi}{2} + n\pi} \omega i\omega(\theta,\beta) \text{ 时}$$

B. 切片丛[第二类公式]: 对偶密钥群生成序列, 并具有局部等价性, 可以定义为

$$\Omega_{Q_E^2(\rho_{(\theta,\beta)}(t'))_t}^{(i\omega, i\omega-1)} \xrightarrow{\pm \frac{\pi}{2} + n\pi} \langle \cos \left(T^{-1} \begin{vmatrix} 1 & 0 \\ 0 & 1 \end{vmatrix} \cdot \sum_{s=3}^m \theta^s \cdot \frac{\theta_{\rho(t)}^{s-1}}{2} \right) \wedge \cos \left(T^{-1} \begin{vmatrix} 0 & 1 \\ 1 & 0 \end{vmatrix} \cdot \sum_{s=3}^m \beta^s \cdot \frac{\beta_{\rho(t)}^{s-1}}{2} \right) \rangle_{S_K^{-1}}^{(i\omega, i\omega-1)}, \therefore$$

$$left, right \Omega(S_{\lambda(t,(\theta,\beta))}^{-1})_{\omega i\omega} \supseteq \Omega_{Q_E^2(\rho_{(\theta,\beta)}(t'))_t}^{(i\omega, i\omega-1)}, \text{ and } \langle i\omega, i\omega - 1 \rangle \xrightarrow{\pm \frac{\pi}{2} + n\pi} \omega i\omega$$

, [所以 B. 公式属于 A. 公式]

. 密钥群[或对偶]生成序列能量变换的空间分布在维度上变换；最后形成的核心分布能量结构

$$S_{left, right}^{m+k-1} \left[{}^{+v-}\Omega_{t'(\theta)}^{S_{\theta M}^{-1}} \left(S_K^{-1}(\rho_{\theta}(t')) \right) \vee {}^{-}\Omega_{t'(\beta)}^{S_{\beta M}^{-1}} \left(S_K^{-1}(\rho_{\beta}(t')) \right) \right] \\ \rightsquigarrow \left[\langle \cos \left(T^{-1} \begin{vmatrix} 1 & 0 \\ 0 & 1 \end{vmatrix} \cdot \sum_{s=3}^m \theta^s \cdot \frac{\theta_{\rho(t)}^{s-1}}{2} \right) \vee \cos \left(T^{-1} \begin{vmatrix} 0 & 1 \\ 1 & 0 \end{vmatrix} \cdot \sum_{s=3}^m \beta^s \cdot \frac{\beta_{\rho(t)}^{s-1}}{2} \right) \rangle_{a_{mm}^{11}} \right]_{S_K^{-1}(t')}$$

$$lef, rightt \Omega(S_K^{-1}(t, (\theta, \beta)))_{\omega^{\omega}} \sim [lef {}^{+}\Omega(S_K^{-1}(t, (\theta, \beta))) \vee right {}^{-}\Omega(S_K^{-1}(t, (\theta, \beta)))]$$

$$lef, rightt \Omega(S_K^{-1}(t, (\theta, \beta)))_{\omega^{\omega}} \rightsquigarrow \left[\sin \left[T^{-1} \begin{vmatrix} 1 & 0 \\ 0 & 1 \end{vmatrix} \cdot \sum_{s=2}^m \rho_{\theta}^s \cdot \frac{\theta_{\rho(t)}^s}{2} \right] \wedge \cos \left[T^{-1} \begin{vmatrix} 0 & 1 \\ 1 & 0 \end{vmatrix} \cdot \sum_{s=2}^m \rho_{\beta}^s \cdot \frac{\beta_{\rho(t)}^s}{2} \right] \right]_{S_K^{-1}}^{\omega^{\omega}(\theta, \beta)}$$

. 关于密钥群生成序列 $S_K^{-1}(t, (\theta, \beta))$ ，而密钥群核势(凸核) $S_K^{-1}(\rho_{\theta}(t'))$

$$S_{left, right}^{m+k-1} \left[{}^{+v-}\Omega_{t'(\theta, \beta)}^{S_{\theta M}^{-1}} \left(S_K^{-1}(\rho_{(\theta, \beta)}(t')) \right) \right]_{S_K^{-1}(t')} \\ \rightsquigarrow \Omega^{k+1} \left[\langle \theta, \beta \rangle \left(\rho_t \left(\sum \frac{\delta}{\omega_i} \times \log |I + R^{-1} \times H_{ij} \times Q_{MR}^{核心能量} \times H_{ji}^H| \right) \right) \right] \quad (34)$$

而 $S_K^{-1}(t, (\theta, \beta))$ 以携带能量为主的密钥群生成序列， $S_K^{-1}(\rho_{\theta}(t'))$ 以携带凸核的密钥群核势的生成序列，且 $S_K^{-1}(t')$ 具有 MR 影像投影。它是一种核势生成序列的人类类通讯 $Q_{MR}^{核心能量}$ 的高、低维分布而形成的一种解译认知知识体系。

$$lef, rightt \Omega(S_K^{-1}(t, (\theta, \beta)))_{\omega^{\omega}} \rightsquigarrow \left[\sin \left[T^{-1} \begin{vmatrix} 1 & 0 \\ 0 & 1 \end{vmatrix} \cdot \sum_{s=2}^m \rho_{\theta}^s \cdot \frac{\theta_{\rho(t)}^s}{2} \right] \wedge \cos \left[T^{-1} \begin{vmatrix} 0 & 1 \\ 1 & 0 \end{vmatrix} \cdot \sum_{s=2}^m \rho_{\beta}^s \cdot \frac{\beta_{\rho(t)}^s}{2} \right] \right]_{S_K^{-1}}^{\omega^{\omega}(\theta, \beta)} \quad (35)$$

此式为类脑(脑)左、右脑分离，且每片约化的记忆悬浮；携带能量为主的密钥群生成序列 $S_K^{-1}(t, (\theta, \beta))$ ， $S_K^{-1}(\rho_{\theta}(t'))$ 以携带凸核的密钥群核势的生成序列。 $S_K^{-1}(t')$ 具有 MR 投影。

$$S_{Left, right}^{m+k-1} \left[{}^{+v-}\Omega_{t'(\theta, \beta)}^{S_{\theta M}^{-1}} \left(S_K^{-1}(\rho_{(\theta, \beta)}(t')) \right) \right]_{S_K^{-1}(t')} \rightsquigarrow \left[\Omega^{k+1}(\theta, \beta) \left(\rho_t \left(\sum \frac{\delta}{\omega_i} \times \log |I \times R^{-1} \times H_{ij} \times Q_{MR}^{核心能量} \times H_{ji}^H| \right) \right) \right]$$

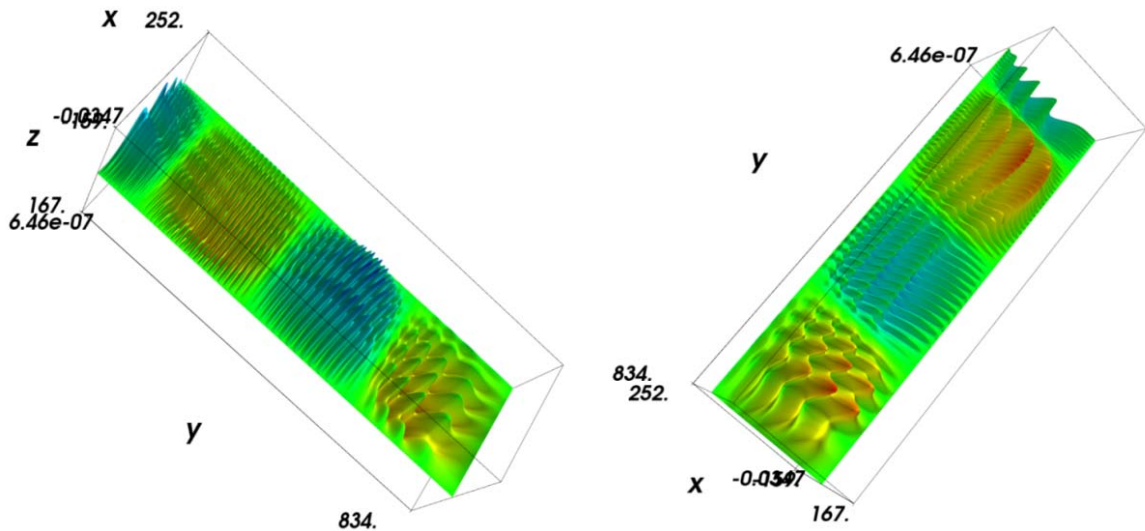


Fig32. 密钥群的生成序列到乔治·康托尔猜想_ RLLM 增强思维能力搜索增强微调和收缩参数群尺度_更高维度幂函数为高维度复变弦线丛**势生成序列**

对偶密钥群_密码表生成序列: $\langle \cos \left(T^{-1} \begin{vmatrix} 1 & 0 \\ 0 & 1 \end{vmatrix} \cdot \sum_{s=3}^m \beta^s \cdot \frac{\beta_{\rho(t)}^{s-1}}{2} \right) \rangle_{a_{nn}^{\uparrow\downarrow}}^{i\omega, i\omega-1} \cdot a_{nn}^{\uparrow\downarrow}, \text{ and } s=2, \omega-1, \omega=1.5$

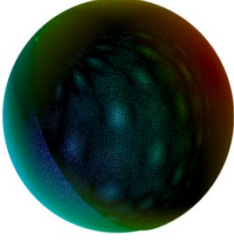


Fig33. 对偶密钥群核势凸核**[密码表]生成序列**

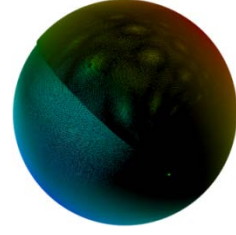


Fig34. 对偶密钥群核势凸核**[密码表]生成序列**

$$\langle \sin \left(T^{-1} \begin{vmatrix} 0 & 1 \\ 1 & 0 \end{vmatrix} \cdot \sum_{s=3}^m \theta^s \cdot \frac{\theta_{\rho(t)}^{s-1}}{2} \right) \vee \cos \left(T^{-1} \begin{vmatrix} 1 & 0 \\ 0 & 1 \end{vmatrix} \cdot \sum_{s=3}^m \beta^s \cdot \frac{\beta_{\rho(t)}^{s-1}}{2} \right) \rangle_{a_{mm}^{\uparrow\downarrow}}^{i\omega, i\omega-1} \rightsquigarrow a_{nn}^{\uparrow\downarrow},$$

对偶密钥群核势凸核密码表之生成序列至对偶密钥群更高维密钥表时, 每次都会产生一阶能量、方向矢量

$$Q_E^2(\rho_{(\theta, \beta)}(t')) \sim \langle \sin \left(\frac{1}{t_1} \cdot \sum_{s=3}^m \theta^s \cdot \frac{\theta_{\rho(t)}^{s-1}}{2} \right) \wedge \cos \left(\frac{1}{t_2} \cdot \sum_{s=3}^m \beta^s \cdot \frac{\beta_{\rho(t)}^{s-1}}{2} \right) \rangle_{a_{mm}^{\uparrow\downarrow}}^{i\omega, i\omega-1}$$

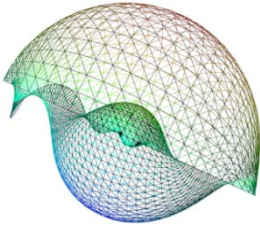


Fig35. 对偶密钥群_高维密钥群**[高维密钥表]**

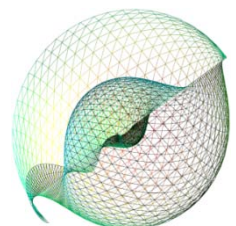


Fig36. 对偶密钥群_高维密钥群**[高维密钥表]**

.类脑(脑)切片丛能量左、右脑结构 $_{lef, right}^{+V-} \Omega(S_{K(t, (\theta, \beta))}^{-1})^{\omega i\omega}$, 以及切片丛核势(凸核)

$S_{lef, right}^{m+k-1} \left[{}^{+V-} \Omega_{t'(\theta, \beta)}^{S_{\partial M}^{-1}} \left(S_K^{-1}(\rho_{(\theta, \beta)}(t')) \right) \right]_{S_K^{-1}(t')};$ 当 $\omega i\omega \rightsquigarrow m+k-1$, 则有

$S_{lef, right}^{m+k-1} \left[{}^{+V-} \Omega_{t'(\theta, \beta)}^{S_{\partial M}^{-1}} \left(S_K^{-1}(\rho_{(\theta, \beta)}(t')) \right) \right]_{S_K^{-1}(t')} \leftarrow {}_{lef, right}^{+V-} \Omega(S_{K(t, (\theta, \beta))}^{-1})^{\omega i\omega}_{S_K^{-1}(t)}, S_{lef, right}^{m+k-1}$

为核心类脑(脑)切片丛所有脑功能。通过类脑(脑)切片神经元波动能量, 形成神经元凸核的核心能量, 并进行 MR 投影的密钥群生成序列, 而解析过程就是高、低维对偶密钥群核势(凸核)解译的认知科学体系。

$$\langle {}_{lef, right}^{+V-} \Omega(S_{K(t, (\theta, \beta))}^{-1})^{\omega i\omega}_{S_K^{-1}(t')}, \Omega^{k+1} \left[\langle \theta, \beta \rangle \left(\rho_t \left(\sum \frac{\delta}{\omega_i} \times \log |I + R^{-1} \times H_{ij} \times Q_{MR}^{\text{核心能量}} \times H_{ji}^H| \right) \right) \right] \rangle$$

$$\rightsquigarrow S_{lef, right}^{m+k-1} \left[{}^{+V-} \Omega_{t'(\theta, \beta)}^{S_{\partial M}^{-1}} \left(S_K^{-1}(\rho_{(\theta, \beta)}(t')) \right) \right]_{S_K^{-1}(t')} \text{核势[凸核]-知识[解译]} \quad (36)$$

$$S_{left, right}^{m+k-1} \left[{}^{+V-}\Omega_{t'(\theta)}^{S_{\partial M}^{-1}} \left(S_K^{-1} \left(\rho_{\theta}(t') \right) \right) \vee {}^{-}\Omega_{t'(\beta)}^{S_{\partial M}^{-1}} \left(S_K^{-1} \left(\rho_{\beta}(t') \right) \right) \right] \\ \rightsquigarrow \left[\langle \cos \left(T^{-1} \begin{vmatrix} 1 & 0 \\ 0 & 1 \end{vmatrix} \cdot \sum_{s=3}^m \theta^s \cdot \frac{\theta_{\rho(t)}^{s-1}}{2} \right) \vee \cos \left(T^{-1} \begin{vmatrix} 1 & 0 \\ 0 & 1 \end{vmatrix} \cdot \sum_{s=3}^m \beta^s \cdot \frac{\beta_{\rho(t)}^{s-1}}{2} \right) \rangle_{a_{mm}^{1, i\omega-1}} \right]_{S_K^{-1}(t')} \quad (37)$$

$$S_{left, right}^{m+k-1} \left[{}^{+V-}\Omega_{t'(\theta, \beta)}^{S_{\partial M}^{-1}} \left(S_K^{-1} \left(\rho_{\langle \theta, \beta \rangle}(t') \right) \right) \right]_{S_K^{-1}(t')}^{\text{核势[凸核]}}$$

RLLM 多模态可预测性思维增强收缩参数群、尺度新一代生成式人工智能重构类脑神经网络
R-KFDNN 与密钥群生成序列》MR 投影

$$S_{Left, right}^{m+k-1} \left[{}^{+V-}\Omega_{t'(\theta, \beta)}^{S_{\partial M}^{-1}} \left(S_K^{-1} \left(\rho_{\langle \theta, \beta \rangle}(t') \right) \right) \right]_{S_K^{-1}(t')} \leftarrow \left[\Omega^{k+1} \langle \theta, \beta \rangle \left(\rho_t \left(\sum \cdot \frac{\delta}{\omega_i} \times \log \left| I \times R^{-1} \times H_{ij} \times Q_{MR}^{\text{核心能量}} \times H_{ij}^H \right| \right) \right) \right] \\ S_{Left, right}^{m+k-1} \left[{}^{+V-}\Omega_{t'(\theta, \beta)}^{S_{\partial M}^{-1}} \left(S_K^{-1} \left(\rho_{\langle \theta, \beta \rangle}(t') \right) \right) \right]_{S_K^{-1}(t')}^{\text{核势[凸核]}} \quad (38),$$

$$\left[\Omega^{k+1} \langle \theta, \beta \rangle \left(\rho_t \left(\sum \cdot \frac{\delta}{\omega_i} \times \log \left| I \times R^{-1} \times H_{ij} \times Q_{MR}^{\text{核心能量}} \times H_{ij}^H \right| \right) \right) \right] \quad (39)$$

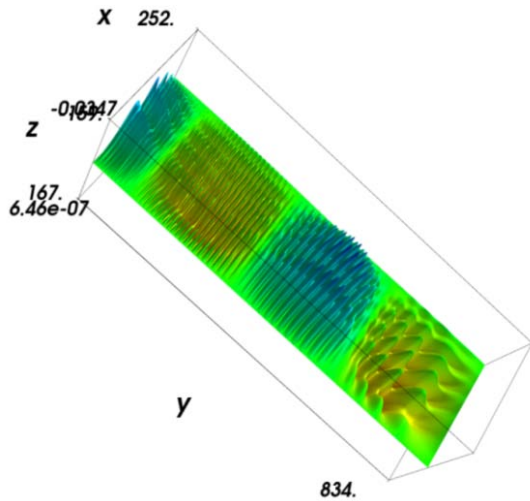
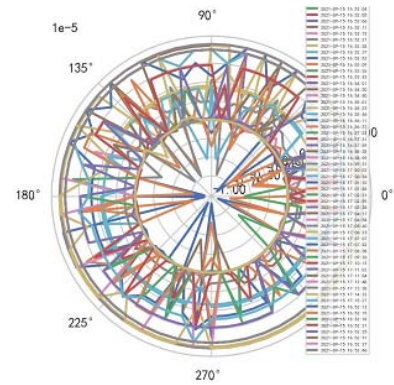


Fig37.类脑 [脑]切片丛核势[凸核]生成序列

Fig38.类脑 [脑]_MR 通讯 $Q_{MR}^{\text{核心能量}}$ 高低维分布

$$left, right {}^{+V-}\Omega(S_{k(t, \langle \theta, \beta \rangle})^{-1})^{\omega(t) \cdot i \cdot \omega(\theta, \beta)} \rightsquigarrow \left[\sin \left(T^{-1} \begin{vmatrix} 1 & 0 \\ 0 & 1 \end{vmatrix} \cdot \sum_{s=2}^m \rho_{\theta}^s \cdot \frac{\theta_{\rho(t)}^{s-1}}{2} \right) \wedge \cos \left(T^{-1} \begin{vmatrix} 1 & 0 \\ 0 & 1 \end{vmatrix} \cdot \sum_{s=3}^m \rho_{\beta}^s \cdot \frac{\beta_{\rho(t)}^{s-1}}{2} \right) \right]^{\omega(t) \cdot i \cdot \omega(\theta, \beta)} \quad (40)$$

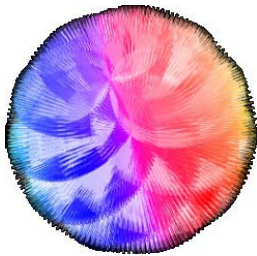


Fig39.类脑[脑]切片丛神经元能量波动

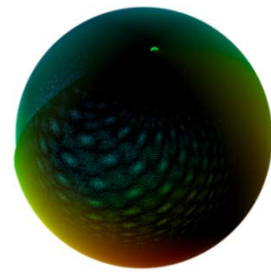


Fig40.类脑[脑]对偶密钥群核势凸核

$$\langle \langle \theta, \beta \rangle \Omega_{T^2}^{i\omega} \Big|_1^0 \Big|_0^1 \wedge \rho_{(\theta, \beta)}(t) \rangle, \langle \langle \theta, \beta \rangle \Omega_{T^2}^{i\omega-1} \Big|_0^1 \Big|_1^0 \wedge \rho_{(\theta, \beta)}(t) \rangle \cdot a_{nn}^{\uparrow\downarrow} \rightsquigarrow \langle \sin \left(T^{-1} \Big|_1^0 \Big|_0^1 \cdot \sum_{s=3}^m \theta^s \cdot \frac{\theta_{\rho(t)}^{s-1}}{2} \right) \vee \cos \left(T^{-1} \Big|_1^0 \Big|_0^1 \cdot \sum_{s=3}^m \beta_*^s \cdot \frac{\beta_{\rho(t)}^{s-1}}{2} \right) \rangle^{(i\omega, i\omega-1)} \cdot a_{mm}^{\uparrow\downarrow} \quad (41)$$

$$\langle \text{left, right} \rangle^{+v-} \Omega(S_{t(\theta, \beta)}^{-1})^{\omega(t)^{i\omega(\theta, \beta)}}, \Omega^{k+1} \langle \theta, \beta \rangle \left(\rho_t \left(\sum \frac{\delta}{\omega_i} \times \log |I \times R^{-1} \times H_{ij} \times Q_{MR}^{\text{核心能量}} \times H_{ij}^H| \right) \right), \rightsquigarrow$$

$$S_{\text{Left, right}}^{m+k-1} \left[{}^{+v-} \Omega_{t(\theta, \beta)}^{S_M^{-1}} (S_{k(\rho_{(\theta, \beta)}(t'))}^{-1}) \right]_{S_{k(t')}^{-1}}^{\text{核势[凸核]}} \rightsquigarrow \text{解译类脑[脑]信息; 解译推理公式群(37) + (38) + (39) + (40)}$$

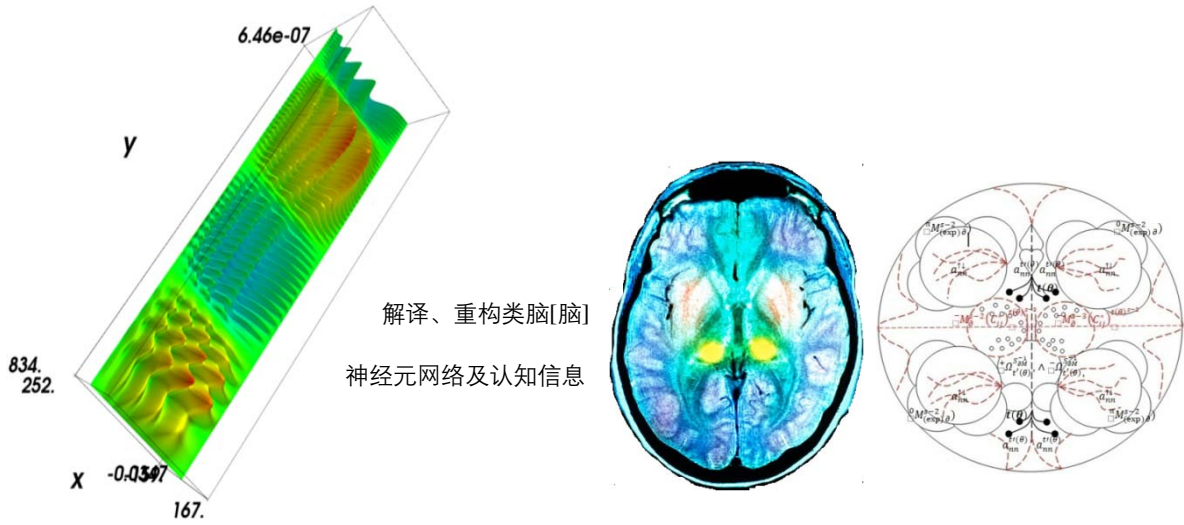


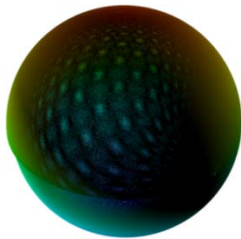
Fig41. 类脑[脑]对偶密钥群生成序列，神经网络及认知信息并解译、重构类脑[脑]

$$\text{高维复合} \langle \sin \left(T^{-1} \Big|_1^0 \Big|_0^1 \cdot \sum_{s=3}^m \theta^s \cdot \frac{\theta_{\rho(t)}^{s-1}}{2} \right) \vee \cos \left(T^{-1} \Big|_1^0 \Big|_0^1 \cdot \sum_{s=3}^m \beta_*^s \cdot \frac{\beta_{\rho(t)}^{s-1}}{2} \right) \rangle^{(i\omega, i\omega-1)} \cdot a_{mm}^{\uparrow\downarrow}$$

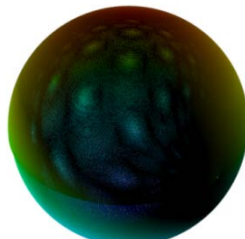
$$\text{低维复合} \langle \sin \left(T^{-1} \Big|_1^0 \Big|_0^1 \cdot \sum_{s=3}^m \theta^s \cdot \frac{\theta_{\rho(t)}^{s-1}}{2} \right) \vee \cos \left(T^{-1} \Big|_1^0 \Big|_0^1 \cdot \sum_{s=3}^m \beta_*^s \cdot \frac{\beta_{\rho(t)}^{s-1}}{2} \right) \rangle^{(i\omega, i\omega-1)} \cdot a_{mm}^{\uparrow\downarrow},$$

$$\text{and } \langle i\omega, i\omega-1 \rangle \rightsquigarrow 1$$

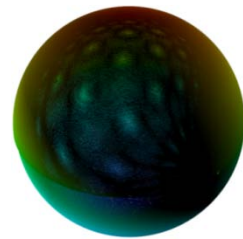
$$\text{高维单体} \langle \cos \left(T^{-1} \Big|_1^0 \Big|_0^1 \cdot \sum_{s=3}^m \beta_*^s \cdot \frac{\beta_{\rho(t)}^{s-1}}{2} \right) \rangle^{(i\omega, i\omega-1)} \cdot a_{nn}^{\uparrow\downarrow}, \text{ or } \langle \cos \left(T^{-1} \Big|_1^0 \Big|_0^1 \cdot \sum_{s=3}^m \theta^s \cdot \frac{\theta_{\rho(t)}^{s-1}}{2} \right) \rangle^{(i\omega, i\omega-1)} \cdot a_{nn}^{\uparrow\downarrow}$$



高维复合范函



低维复合范函



高维单体范函

Fig42. 类脑[脑]对偶密钥群核势[凸核]生成序列，高维复合范函与低维复合范函以及高维单体范函方程与程序设计模型

.携带高维神经受损[恢复]基因 $\sin\left(T^{-1}\begin{vmatrix} 0 & 1 \\ 1 & 0 \end{vmatrix} \cdot \sum_{s=3}^m \theta^s \cdot \frac{\theta_{\rho(t)}^{s-1}}{2}\right)$ 高维复合对偶密钥群核势[凸核]生成序列；以及低高维神经受损[恢复]基因 $\sin\left(T^{-1}\begin{vmatrix} 0 & 1 \\ 1 & 0 \end{vmatrix} \cdot \sum_{s=3}^m \theta^s \cdot \frac{\theta_{\rho(t)}^{s-1}}{2}\right)$ 低维复合对偶密钥群核势[凸核]生成序列；这种高低维度形态存在局部神经元信息恢复的缺失现象。同时高维单体对偶密钥群核势[凸核]生成序列，不具有携带高维神经受损[恢复]基因的可能性。

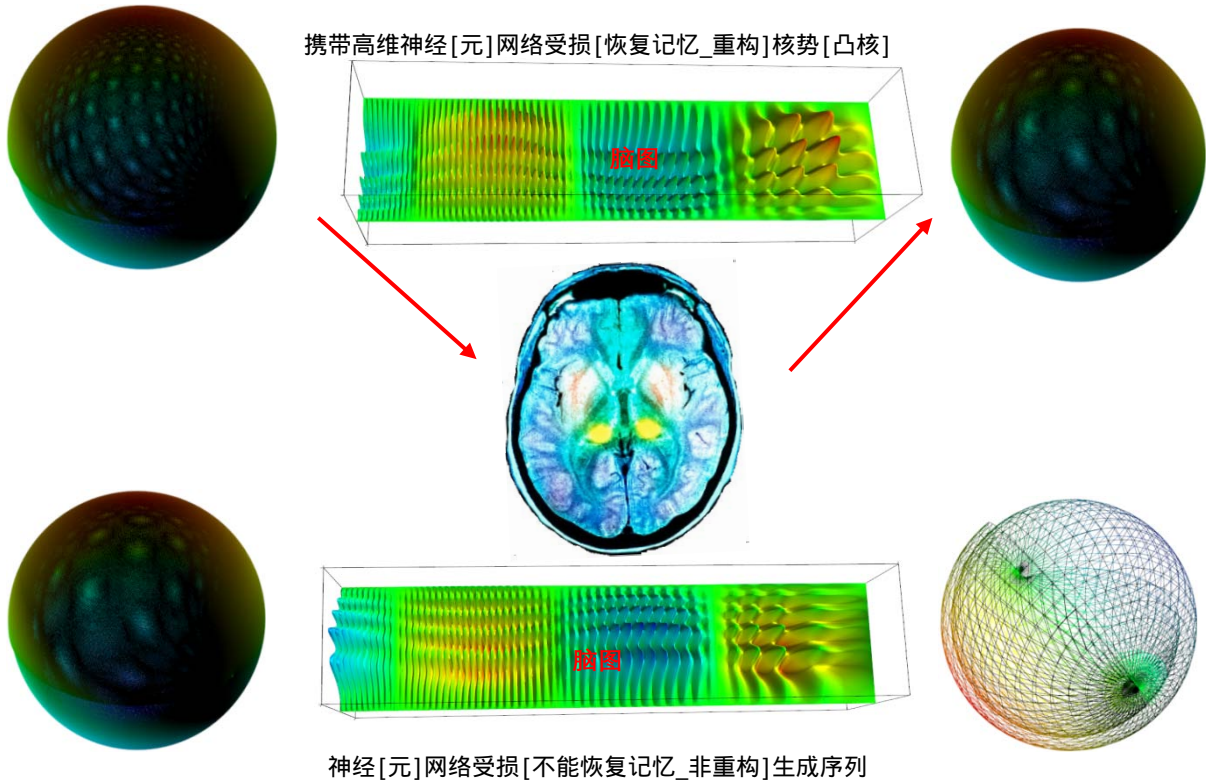


Fig43. 类脑[脑] 携带高维神经受损[恢复]记忆的高维复合对偶密钥群核势[凸核]生成序列，以及低维神经受损[恢复]记忆；高低维度形态存在局部神经元信息恢复的缺失问题；同时高维单体对偶密钥群核势[凸核]生成序列，不具有携带高维神经受损[恢复]记忆的可能性；并实现程设模型

.重构类脑(脑)神经网络，不是所有脑区神经元都能受损重构的，即只有特殊携带高维神经(元)网络，受损局部神经元恢复记忆重构，并形成新的对偶密钥群核势(凸核)生成序列。所以，《RLLM 多模态可预测性思维增强收缩参数群、尺度新一代生成式人工智能重构类脑神经网络 R-KFDNN 与密钥群生成序列》，携带尖端的《新一代生成式人工智能的密码学》。从而重构类脑(脑)神经(元)网络与生成式 AI 密码学相对应，即类脑(脑)神经元与对偶密钥群核势[凸核]生成序列相对应的重构结构学，凸核核势[神经元] $a_{nn}^{\uparrow\downarrow} \rightsquigarrow a_{mm}^{\uparrow\downarrow}$

3.1. 《RLLM 多模态可预测性思维增强收缩参数群、尺度新一代生成式人工智能重构类脑神经网络 R-KFDNN 与密钥群生成序列》的维度数据与折叠形态与类叠丛花瓣型微细纤维丛

3.1.1 提高维度数据与折叠形态图像结构的生成式人工智能，孪生智能数模与基于微分增量平衡理论基础上分层模糊聚类系统的重核聚类热核

$$x = \sin\left(\frac{A_1}{2} + \frac{\pi}{4} + s \cdot \frac{\pi}{4}\right) \cos\left(\sum_{i=2}^m A_i + \sum_{i=1}^m i \cdot \frac{A_i}{2}\right), y = -\sin\left(\frac{B_1}{2} + \frac{\pi}{4} + s \cdot \frac{\pi}{4}\right) \cos\left(\sum_{i=2}^m B_i + \sum_{i=1}^m i \cdot \frac{B_i}{2}\right)$$

$$z = \left(\frac{1}{4}\right)^s \left[\sin\left(A_1 + \sum_{i=2}^m A_i + s \cdot \frac{\pi}{4}\right) + \sin\left(A_1 - \sum_{i=2}^m A_i + s \cdot \frac{\pi}{4}\right) \right]^{s-1}, \text{ and } s = 4, 5, 6, \dots, 20$$

for i in range(1000)

$$x = \sin\left(\frac{A_1}{2} + \frac{\pi}{4} + s \cdot \frac{\pi}{4}\right) \left(1 + \cos\left(\sum_{i=2}^m A_i + \sum_{i=1}^m i \cdot \frac{A_i}{2}\right)\right), \text{ calars} = \sin\left(\frac{A_1}{2} + \frac{\pi}{4} + s \cdot \frac{\pi}{4}\right), \text{ms.set}(z = x, \text{scalars}) \quad (42)$$

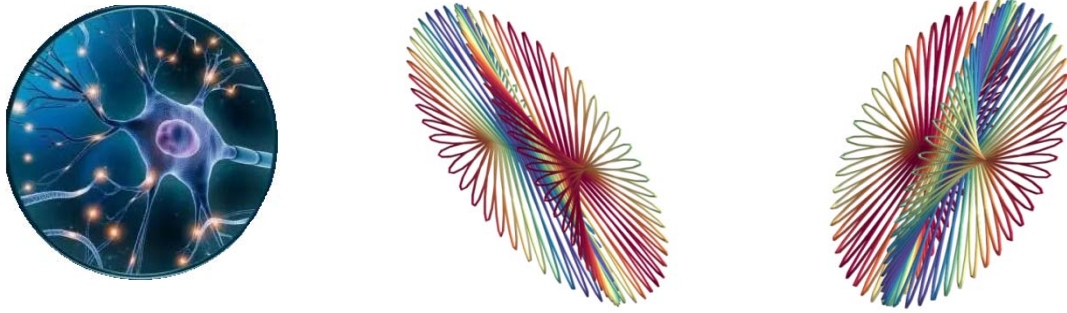


Fig44. 提高维度数据与折叠形态图像结构的生成式人工智能，孪生智能数模与基于微分增量平衡理论基础上分层模糊聚类系统的重核聚类热核 A 模型

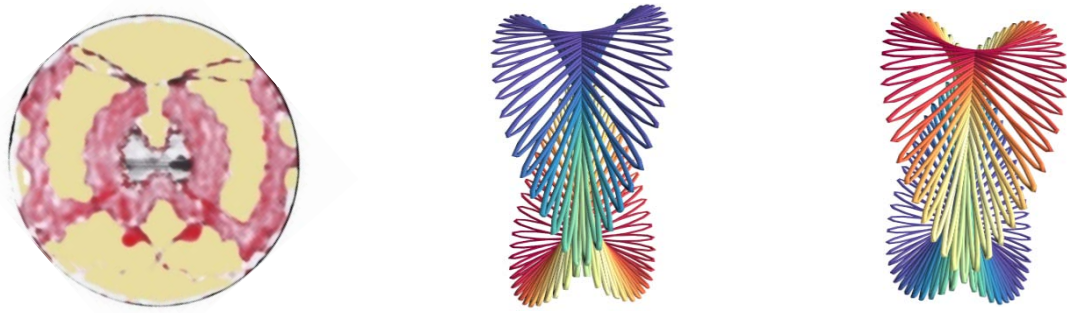


Fig45. 《热核超球类圆域超曲面》将高维数据融入参数核中，形成高维数据重核聚类、边界生成序列正态概率的孪生智能《类叠丛花瓣型微细纤维丛》调和邻域覆盖的双全纯函数映照限制性多变量热核偏微分

3.1.2 高维数据重核聚类、边界生成序列正态概率的孪生智能《类叠丛花瓣型微细纤维丛》调和邻域覆盖的双全纯函数映照限制性多变量热核偏微分非退化高维超球、超曲面图像

孪生智能《类叠丛花瓣型微细纤维丛》调和邻域覆盖

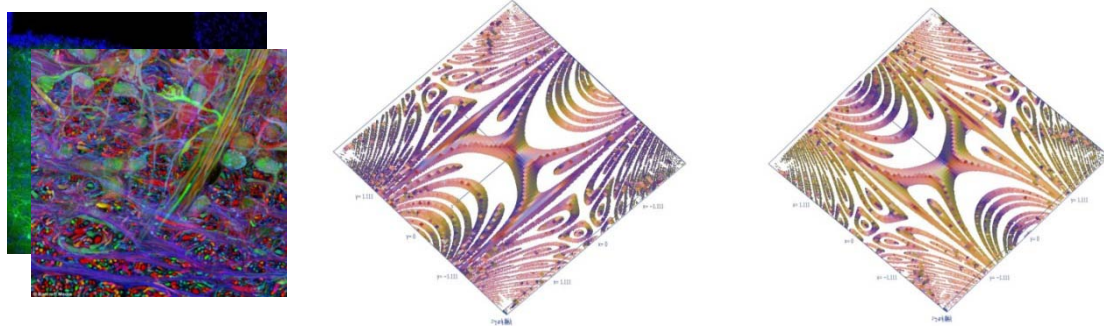


Fig46. 高维数据重核聚类、边界生成序列正态概率的孪生智能《类叠丛花瓣型微细纤维丛》调和邻域覆盖的双全纯函数映照限制性多变量热核偏微分非退化高维超球、超曲面图像

$$\begin{aligned}
r &= 4 \cdot \frac{1}{\lambda + 1} \cdot \left[\cos \left[2 \left(e^{i(g_{c(n)}^{k-}, a_{c(n-2)})} \cdot (1 \pm i^2 \cdot (g_{c(n)}^{k-}, a_{c(n-1)})^2) \right) \right] \right. \\
&\quad \left. - \sin \left[2 \left(e^{-i^2(g_{c(n)}^{k-}, a_{c(n-2)})} \cdot (1 \pm i^2 \cdot (g_{c(n)}^{k-}, a_{c(n-1)})^2) \right) \right] \right]^2 \times \\
&\quad \tanh^2 \left[\cos \left[2 \left(e^{i(g_{c(n)}^{k-}, a_{c(n-2)})} \cdot (1 \pm i^2 \cdot (g_{c(n)}^{k-}, a_{c(n-1)})^2) \right) \right] - \sin \left[2 \left(e^{-i^2(g_{c(n)}^{k-}, a_{c(n-2)})} \cdot (1 \pm i^2 \cdot (g_{c(n)}^{k-}, a_{c(n-1)})^2) \right) \right] \right] \\
l &= 4 \cdot \frac{1}{\lambda + 1} \cdot \left[\cos \left[2 \left(e^{i(g_{c(n)}^{k-}, a_{c(n-2)})} \cdot (1 \pm i^2 \cdot (g_{c(n)}^{k-}, a_{c(n-1)})^2) \right) \right] \right. \\
&\quad \left. + \sin \left[2 \left(e^{-i^2(g_{c(n)}^{k-}, a_{c(n-2)})} \cdot (1 \pm i^2 \cdot (g_{c(n)}^{k-}, a_{c(n-1)})^2) \right) \right] \right]^2 \times \\
&\quad \tanh^2 \left[\cos \left[2 \left(e^{i(g_{c(n)}^{k-}, a_{c(n-2)})} \cdot (1 \pm i^2 \cdot (g_{c(n)}^{k-}, a_{c(n-1)})^2) \right) \right] \right. \\
&\quad \left. + \sin \left[2 \left(e^{-i^2(g_{c(n)}^{k-}, a_{c(n-2)})} \cdot (1 \pm i^2 \cdot (g_{c(n)}^{k-}, a_{c(n-1)})^2) \right) \right] \right] \quad (43)
\end{aligned}$$

$$\begin{cases} x = (r + l) \times \sin(\theta) \times \cos(\beta) \\ y = (r + l) \times \cos(\theta) \\ z = (r + l) \times \sin(\theta) \times \sin(\beta) \end{cases}$$

.高维数据重核聚类、边界生成序列正态概率的孪生智能《类叠丛花瓣型微细纤维丛》调和邻域覆盖的双全纯函数映照限制性多变量热核偏微分非退化高维超球、超曲面图像[调整参数]

$$x = \sin \left(\frac{A_1}{2} + \frac{\pi}{4} + s \cdot \frac{\pi}{4} \right) \cos \left(\sum_{i=2}^m A_i + \sum_{i=1}^m i \cdot \frac{A_i}{2} \right), y = -\sin \left(\frac{B_1}{2} + \frac{\pi}{4} + s \cdot \frac{\pi}{4} \right) \cos \left(\sum_{i=2}^m B_i + \sum_{i=1}^m i \cdot \frac{B_i}{2} \right)$$

$$z = \left(\frac{1}{4} \right)^s \left[\sin \left(A_1 + \sum_{i=2}^m A_i + s \cdot \frac{\pi}{4} \right) + \sin \left(A_1 - \sum_{i=2}^m A_i + s \cdot \frac{\pi}{4} \right) \right]^{s-1}, \text{ and } s = 4, 5, 6, \dots, 20$$

for i in range(1000)

$$\begin{aligned}
x &= \sin \left(\frac{A_1}{2} + \frac{\pi}{4} + s \cdot \frac{\pi}{4} \right) \left((i + 1)\pi + \cos \left(\sum_{i=2}^m A_i + \sum_{i=1}^m i \cdot \frac{A_i}{2} \right) \right), \text{ calars} \\
&= \sin \left(\frac{A_1}{2} + \frac{\pi}{4} + s \cdot \frac{\pi}{4} \right), \text{ ms.set}(z = x, \text{ scalars}) \quad (44)
\end{aligned}$$

$$\begin{aligned}
r &= 4 \cdot \frac{1}{\lambda + 1} \cdot \left[\cos \left[2 \left(e^{i(g_{c(n)}^{k-}, a_{c(n-2)})} \cdot (1 \pm i^2 \cdot (g_{c(n)}^{k-}, a_{c(n-1)})^2) \right) \right] \right. \\
&\quad \left. - \sin \left[2 \left(e^{-i^2(g_{c(n)}^{k-}, a_{c(n-2)})} \cdot (1 \pm i^2 \cdot (g_{c(n)}^{k-}, a_{c(n-1)})^2) \right) \right] \right]^2 \times \\
&\quad \tanh^2 \left[\cos \left[2 \left(e^{i(g_{c(n)}^{k-}, a_{c(n-2)})} \cdot (1 \pm i^2 \cdot (g_{c(n)}^{k-}, a_{c(n-1)})^2) \right) \right] - \sin \left[2 \left(e^{-i^2(g_{c(n)}^{k-}, a_{c(n-2)})} \cdot (1 \pm i^2 \cdot (g_{c(n)}^{k-}, a_{c(n-1)})^2) \right) \right] \right] \\
l &= 4 \cdot \frac{1}{\lambda + 1} \cdot \left[\cos \left[2 \left(e^{i(g_{c(n)}^{k-}, a_{c(n-2)})} \cdot (1 \pm i^2 \cdot (g_{c(n)}^{k-}, a_{c(n-1)})^2) \right) \right] \right. \\
&\quad \left. + \sin \left[2 \left(e^{-i^2(g_{c(n)}^{k-}, a_{c(n-2)})} \cdot (1 \pm i^2 \cdot (g_{c(n)}^{k-}, a_{c(n-1)})^2) \right) \right] \right]^2 \times
\end{aligned}$$

$$\tanh^2 \left[\cos \left[2 \left(e^{i(g_{c(n)}^{k-}, a_{c(n-2)})} \cdot (1 \pm i^2 \cdot (g_{c(n)}^{k-}, a_{c(n-1)})^2) \right) \right] \right. \\ \left. + \sin \left[2 \left(e^{-i^2(g_{c(n)}^{k-}, a_{c(n-2)})} \cdot (1 \pm i^2 \cdot (g_{c(n)}^{k-}, a_{c(n-1)})^2) \right) \right] \right] \quad (45)$$

. 调和邻域覆盖的双全纯函数映照限制性多变量热核偏微分非退化形态的同态性变换

$$\tanh^2 \left[\cos \left[2 \left(e^{i(g_{c(n)}^{k-}, a_{c(n-2)})} \cdot (1 \pm i^2 \cdot (g_{c(n)}^{k-}, a_{c(n-1)})^2) \right) \right] + \sin \left[2 \left(e^{-i^2(g_{c(n)}^{k-}, a_{c(n-2)})} \cdot (1 \pm i^2 \cdot (g_{c(n)}^{k-}, a_{c(n-1)})^2) \right) \right] \right]$$

调和邻域覆盖的双全纯函数映照限制性
多变量热核偏微分非退化形态的同态性

$$\frac{1}{\tanh^2 \left[\cos \left[2 \left(e^{i(g_{c(n)}^{k-}, a_{c(n-2)})} \cdot (1 \pm i^2 \cdot (g_{c(n)}^{k-}, a_{c(n-1)})^2) \right) \right] + \sin \left[2 \left(e^{-i^2(g_{c(n)}^{k-}, a_{c(n-2)})} \cdot (1 \pm i^2 \cdot (g_{c(n)}^{k-}, a_{c(n-1)})^2) \right) \right] \right]}$$

$$r = 4 \cdot \frac{1}{\lambda + 1} \cdot \left[\cos \left[2 \left(e^{i(g_{c(n)}^{k-}, a_{c(n-2)})} \cdot (1 \pm i^2 \cdot (g_{c(n)}^{k-}, a_{c(n-1)})^2) \right) \right] \right. \\ \left. - \sin \left[2 \left(e^{-i^2(g_{c(n)}^{k-}, a_{c(n-2)})} \cdot (1 \pm i^2 \cdot (g_{c(n)}^{k-}, a_{c(n-1)})^2) \right) \right] \right]^2 \times$$

$$\frac{1}{\tanh^2 \left[\cos \left[2 \left(e^{i(g_{c(n)}^{k-}, a_{c(n-2)})} \cdot (1 \pm i^2 \cdot (g_{c(n)}^{k-}, a_{c(n-1)})^2) \right) \right] - \sin \left[2 \left(e^{-i^2(g_{c(n)}^{k-}, a_{c(n-2)})} \cdot (1 \pm i^2 \cdot (g_{c(n)}^{k-}, a_{c(n-1)})^2) \right) \right] \right]}$$

$$l = 4 \cdot \frac{1}{\lambda + 1} \cdot \left[\cos \left[2 \left(e^{i(g_{c(n)}^{k-}, a_{c(n-2)})} \cdot (1 \pm i^2 \cdot (g_{c(n)}^{k-}, a_{c(n-1)})^2) \right) \right] \right. \\ \left. + \sin \left[2 \left(e^{-i^2(g_{c(n)}^{k-}, a_{c(n-2)})} \cdot (1 \pm i^2 \cdot (g_{c(n)}^{k-}, a_{c(n-1)})^2) \right) \right] \right]^2 \times$$

$$\frac{1}{\tanh^2 \left[\cos \left[2 \left(e^{i(g_{c(n)}^{k-}, a_{c(n-2)})} \cdot (1 \pm i^2 \cdot (g_{c(n)}^{k-}, a_{c(n-1)})^2) \right) \right] + \sin \left[2 \left(e^{-i^2(g_{c(n)}^{k-}, a_{c(n-2)})} \cdot (1 \pm i^2 \cdot (g_{c(n)}^{k-}, a_{c(n-1)})^2) \right) \right] \right]}$$

$$\begin{cases} x = (r + l) \times \sin(\theta) \times \cos(\beta) \\ y = (r + l) \times \cos(\theta) \\ z = (r + l) \times \sin(\theta) \times \sin(\beta) \end{cases} \quad (46)$$

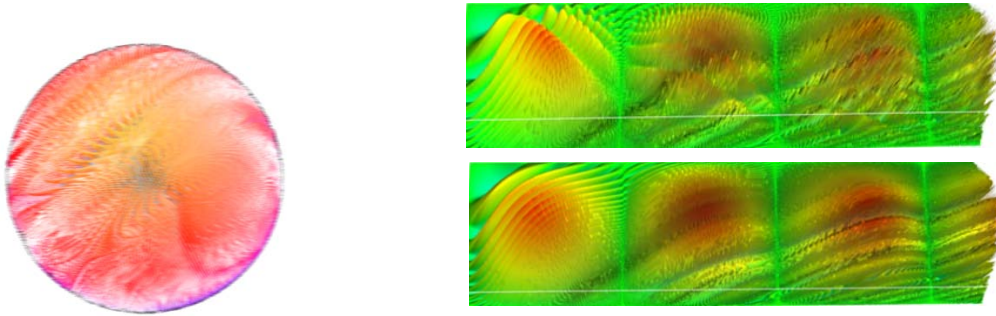


Fig47. 《热核超球类圆域超曲面》的参数方程，若将高维数据融入参数核中，可以形成高维数据重核聚类、边界生成序列正态概率的孪生智能《类叠丛花瓣型微细纤维丛》调和邻域覆盖的双全纯函数映照限制性多变量热核偏微分非退化形态的高维超球、超曲面。

$$\begin{aligned}
& \left(\frac{1}{4}\right)^s \times \left[\left(\sin\left(A_1 + \vartheta \times \sum_{i=2}^m \theta_i + s \cdot \frac{\pi}{4}\right) + \sin\left(A_1 - \vartheta \times \sum_{i=2}^m \theta_i + s \cdot \frac{\pi}{4}\right) \right) \times \tanh(\theta_i) \right. \\
& \quad \left. + \left(\sin\left(B_1 + \vartheta \times \sum_{i=2}^m \beta_i + s \cdot \frac{\pi}{4}\right) + \sin\left(B_1 - \vartheta \times \sum_{i=2}^m \beta_i + s \cdot \frac{\pi}{4}\right) \right) \times \cosh(\theta_i) \right]^{s-1} \\
& a = 100; b = 200; s = 4; \theta, \beta = \frac{\pi}{250}, \frac{\pi}{250}; [\theta, \beta] = \text{mgrid}\left[0: \pi + \theta \times \frac{16}{8}: \beta, 0: 20/8 \times \pi + \beta \times 1.5: \beta\right] \\
& m0 = s - 1; m1 = s - 1; m2 = s - 1; m3 = s - 1; m4 = s - 1; m5 = s - 1; m6 = s - 1; m7 = s - 1; \\
& z = \left(\frac{1}{4}\right)^s \times \left[\left(\sin\left(a + \vartheta \times m0 \times \sum_{i=2}^m \theta_i + s \cdot \frac{\pi}{4}\right)^{m1} + \sin\left(a - m2 \times \sum_{i=2}^m \theta_i + s \cdot \frac{\pi}{4}\right)^{m3} \right) \times \tanh(\theta_i) \right. \\
& \quad \left. + \left(\sin\left(a + m4 \times \sum_{i=2}^m \beta_i + s \cdot \frac{\pi}{4}\right)^{m5} + \sin\left(B_1 - m6 \times \sum_{i=2}^m \beta_i + s \cdot \frac{\pi}{4}\right)^{m7} \right) \times \cosh(\theta_i) \right], \quad (47)
\end{aligned}$$

$$\begin{cases} x = r \times \sin(\theta) \times \cos(\beta) \\ y = r \times \cos(\theta) \\ z = r \times \sin(\theta) \times \sin(\beta) \end{cases}$$

```

p1 = mlab.surf(x,y,z,warpscale = "auto")
mlab.axes(xlabel = 'x',ylabel = 'y',zlabel = 'z')
mlab.outline(pl)
mlab.show()

```

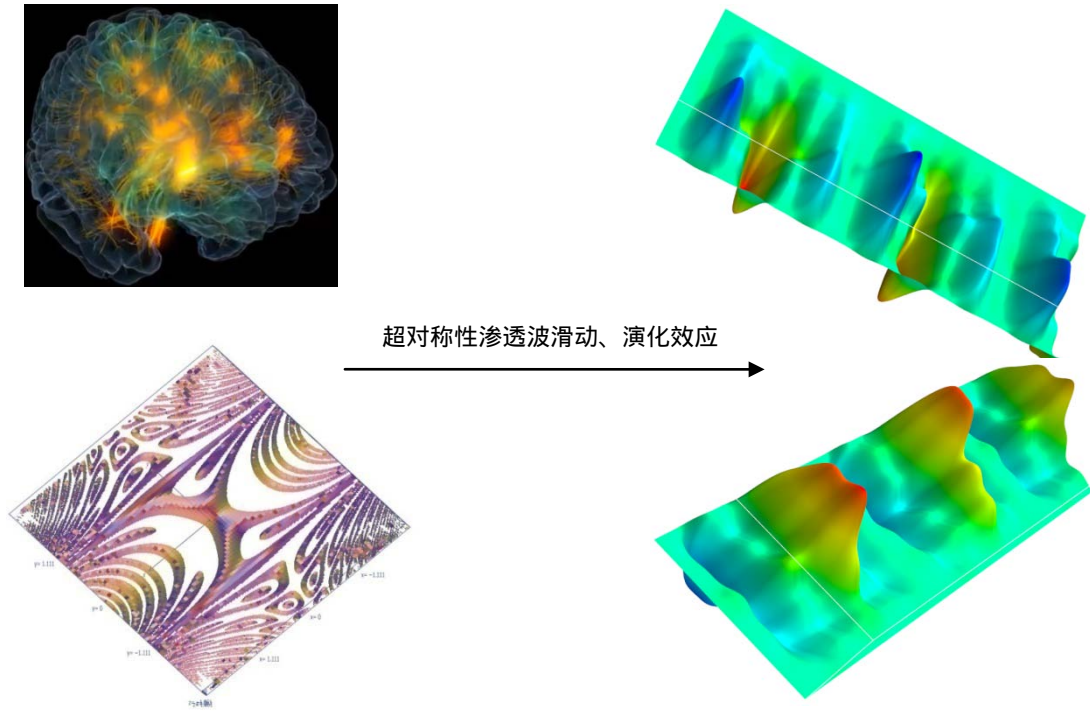


Fig48. 数学演化中《类叠丛花瓣形微细纤维丛》波动扩散的超对称性渗透与波的滑动效应孤立子波分析图像

. 调提高维度数据与折叠形态图像结构的生成式人工智能，孪生智能数模与基于微分增量平衡理论基础上分层模糊聚类系统的重核聚类热核模型

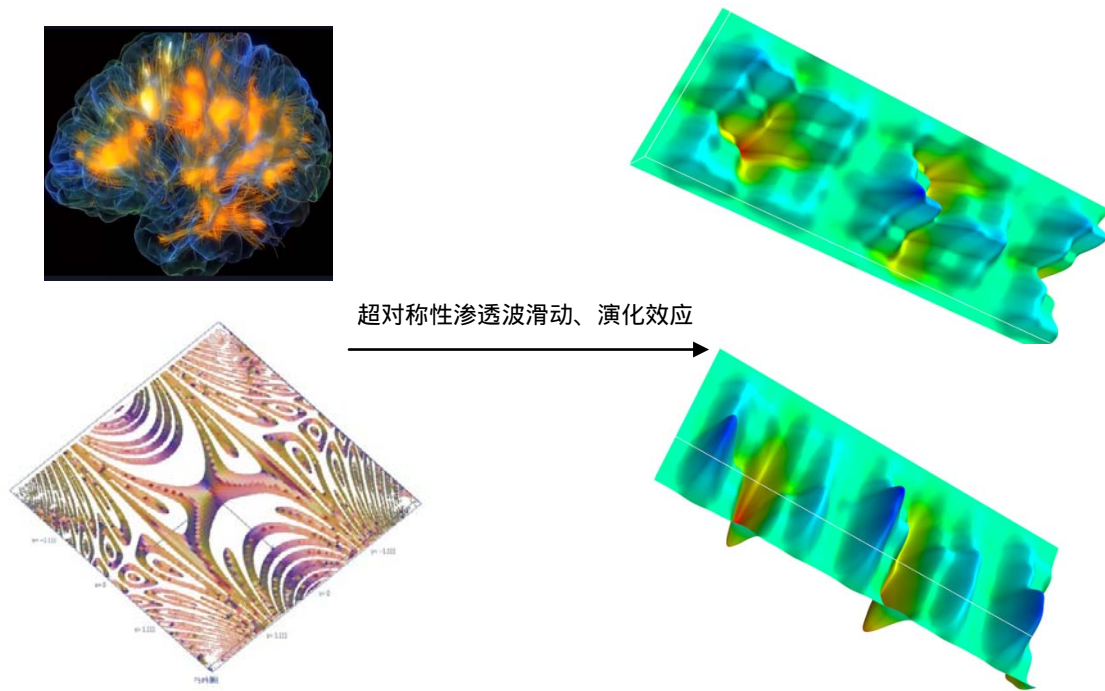


Fig49. 《数学演化中的《类叠丛花瓣形微细纤维丛》波动扩散的超对称性渗透与波的滑动效应孤立子波分析图像[调整参数]

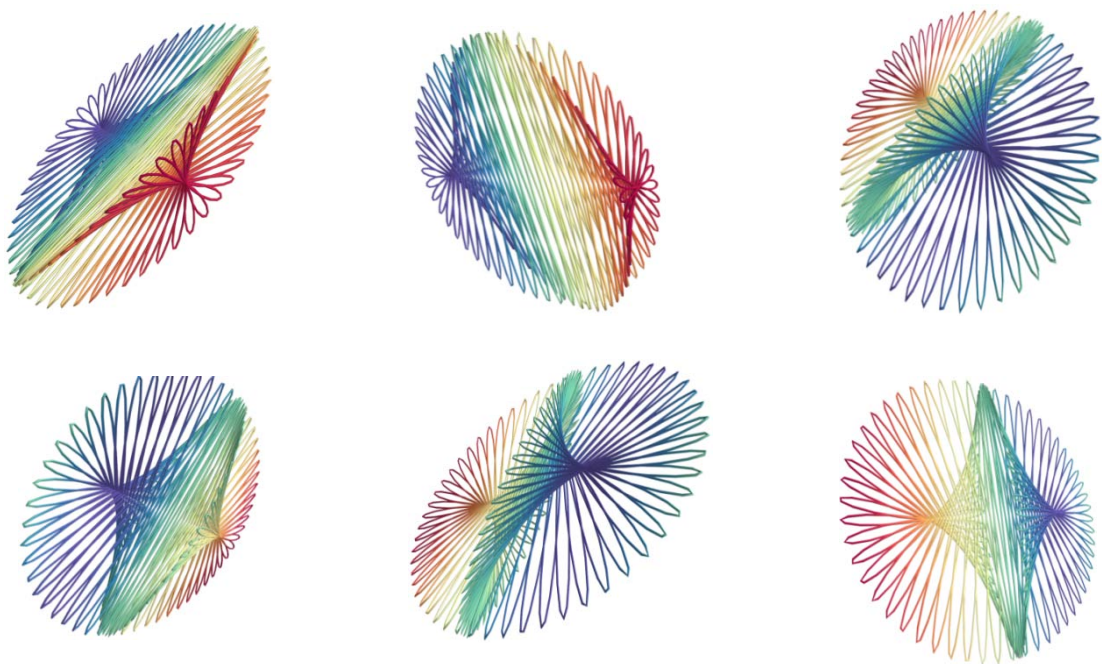


Fig50. 提高维度数据与折叠形态图像结构的生成式人工智能，孪生智能数模与基于微分增量平衡理论基础上分层模糊聚类系统的重核聚类热核 D 模型

$$x = \sin\left(\frac{A_1}{2} + \frac{\pi}{4} + s \cdot \frac{\pi}{4}\right) \cos\left(\sum_{i=2}^m A_i + \sum_{i=1}^m i \cdot \frac{A_i}{2}\right), y = -\sin\left(\frac{B_1}{2} + \frac{\pi}{4} + s \cdot \frac{\pi}{4}\right) \cos\left(\sum_{i=2}^m B_i + \sum_{i=1}^m i \cdot \frac{B_i}{2}\right)$$

$$z = \left(\frac{1}{4}\right)^s \left[\sin\left(A_1 + \sum_{i=2}^m A_i + s \cdot \frac{\pi}{4}\right) + \sin\left(A_1 - \sum_{i=2}^m A_i + s \cdot \frac{\pi}{4}\right) \right]^{s-1}, \text{ and } s = 4, 5, 6, \dots, 20$$

for i in range(1000)

$$x = \sin\left(\frac{A_1}{2} + \frac{\pi}{4} + s \cdot \frac{\pi}{4}\right) \left(1 + \cos\left(\sum_{i=2}^m A_i + \sum_{i=1}^m i \cdot \frac{A_i}{2}\right)\right), \text{calars} = \sin\left(\frac{A_1}{2} + \frac{\pi}{4} + s \cdot \frac{\pi}{4}\right), \text{ms.set}(z = x, \text{scalars}) \quad (48)$$

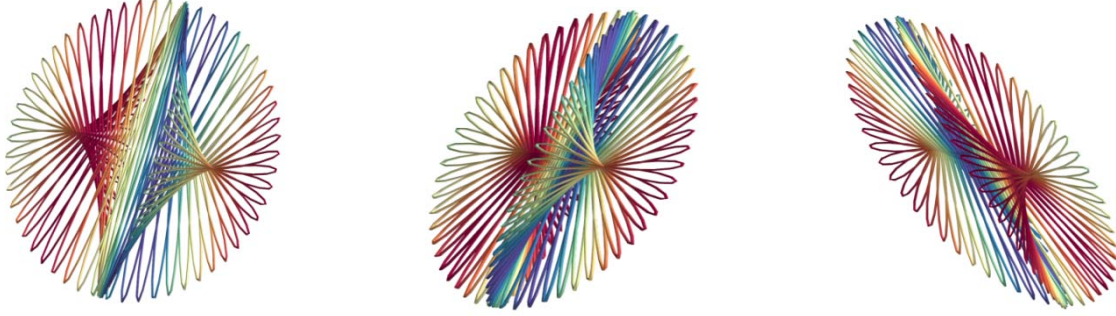


Fig51. 提高维度数据与折叠形态图像结构的生成式人工智能，孪生智能数模与基于微分增量平衡理论基础上分层模糊聚类系统的重核聚类热核 A 模型

$$x = \sin\left(\frac{A_1}{2} + \frac{\pi}{4} + s \cdot \frac{\pi}{4}\right) \cos\left(\sum_{i=2}^m A_i + \sum_{i=1}^m i \cdot \frac{A_i}{2}\right), y = -\sin\left(\frac{B_1}{2} + \frac{\pi}{4} + s \cdot \frac{\pi}{4}\right) \cos\left(\sum_{i=2}^m B_i + \sum_{i=1}^m i \cdot \frac{B_i}{2}\right)$$

$$z = \left(\frac{1}{4}\right)^s \left[\sin\left(A_1 + \sum_{i=2}^m A_i + s \cdot \frac{\pi}{4}\right) + \sin\left(A_1 - \sum_{i=2}^m A_i + s \cdot \frac{\pi}{4}\right) \right]^{s-1}, \text{ and } s = 4, 5, 6, \dots, 20$$

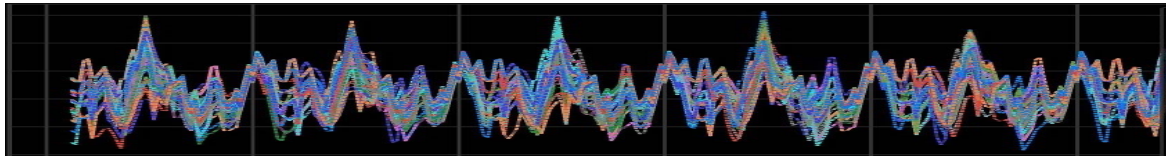
for i in range(1000)

$$x = \sin\left(\frac{A_1}{2} + \frac{\pi}{4} + s \cdot \frac{\pi}{4}\right) \left((i+1)\pi + \cos\left(\sum_{i=2}^m A_i + \sum_{i=1}^m i \cdot \frac{A_i}{2}\right) \right), \text{calars} \\ = \sin\left(\frac{A_1}{2} + \frac{\pi}{4} + s \cdot \frac{\pi}{4}\right), \text{ms.set}(z = x, \text{scalars}) \quad (49)$$

4.1. RLLM 实现压缩量尺度直接调用 1-4 核 CPU、部署高级调度的 30 多个并行计算

4.1.1 RLLM 实现拟思维迭代规划中注入了 AI 偏微分局部振动及渗透领域迭代；其中关键技术还存在于局部振动中加入随机量的扰动结构，使之正真成为了生成式人工智能。

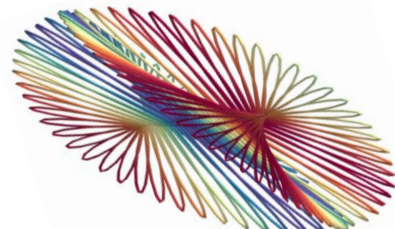
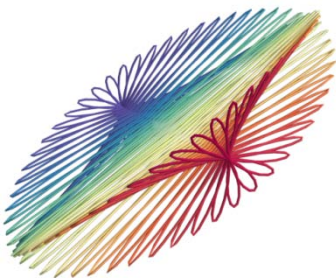
随机量、局部振动、邻域渗透的微扰微分差分内核迭代。下图为拟思维迭代规划拟合曲线



邻域渗透

局部振动

重核随机梯度滑动聚类



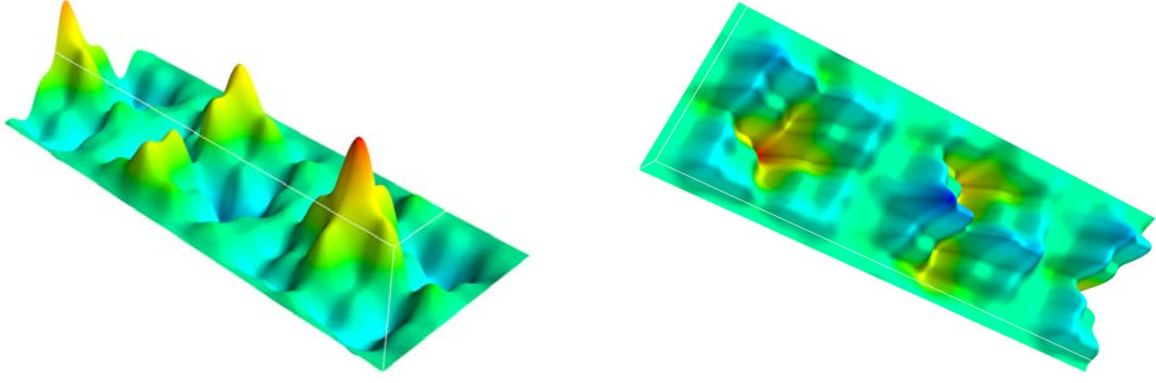


Fig52. RLLM 实现拟思维迭代规划中AI 偏微分局部振动及渗透领域迭代同时存在局部振动和随机量的扰动结构的生成式人工智能

类脑重核边界密钥群生成序列超切面与柔性神经网络(KFNN)、类脑神经网络的关系

- . 内核超球体指数型单纯形态密钥群势生成序列的正态概率分布，从 $S^{\omega+1} \rightarrow S_{exp}^{\omega+1}$ 形态拓扑同态的高维度超对称超曲面的正态复变高维切丛 ${}^{1,2}S_{M_\partial}^{\omega(\theta)+1} \sim {}^{1,2}S_{M_\partial(exp)}^{\omega(\theta)+1}$
- ii. 密钥群势生成序列的超切空间重核 ${}^+\Omega_{t'}^{S_{\partial M}^{-1}}(\theta)^*$ 、 ${}^-\Omega_{t'}^{S_{\partial M}^{-1}}(\theta)_*$ ，具有类脑形态重核边界的超切丛、余切丛的稀疏矩阵密钥群势生成序列的超切面正态概率分布。

$${}^{1,2}S_{M_\partial(exp)}^{\omega(\theta)+1} = \frac{1}{\sqrt{2\pi}(s-2)(s-3)} \sum_{\omega=s}^{2n} \left(M_\partial^{-1} \cdot \exp\left(-M_\partial^{s-2}(\theta_{t(0)}^{s-2})\right)^{\frac{1}{2}(\theta_{t(0)}^{s-2}-M_\partial^{-1})^2}, M_\partial^{-1} \cdot \exp\left(-M_\partial^{s-2}(\theta_{t(\pi)}^{s-2})\right)^{\frac{1}{2}(\theta_{t(\pi)}^{s-2}-M_\partial^{-1})^2} \right) \quad (50)$$

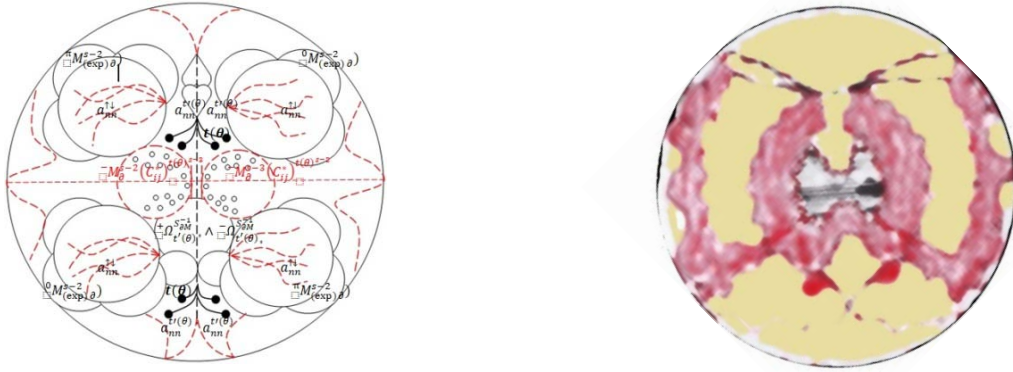


Fig53. 高维核单纯型超切丛、余切丛的稀疏矩阵密钥群势生成序列的正态概率分布的切面

$$\begin{aligned} {}^{1,2}S_{M_\partial(exp)}^{\omega(\theta)+1} &= \frac{1}{\sqrt{2\pi}(s-2)(s-3)} \sum_{\omega=s}^{2n} \left(M_\partial^{-1} \cdot \exp\left(-M_\partial^{s-2}(\theta_{t(0)}^{s-2})\right)^{\frac{1}{2}(\theta_{t(0)}^{s-2}-M_\partial^{-1})^2}, M_\partial^{-1} \cdot \exp\left(-M_\partial^{s-2}(\theta_{t(\pi)}^{s-2})\right)^{\frac{1}{2}(\theta_{t(\pi)}^{s-2}-M_\partial^{-1})^2} \right) \\ &= \nabla_{\text{神经网络}}^{\text{柔性神经网络}} K_{NN \text{ 指纹特征}}^n(\rho_\lambda^\sigma, \theta^\lambda) \end{aligned}$$

$$\sqrt[n]{\text{柔性神经网络 } K^{(n-m)}_{\text{NN 指纹特征}}} \left\{ \rho_{\Lambda}^{(n-m)-2} \begin{bmatrix} \theta_{ij} \\ \theta_{(i+1)(j+2)} \\ \dots \end{bmatrix}_{\text{Matrix}} \right\} = \frac{1}{\sqrt{2\pi}(s-2)(s-3)} \sum_{\omega=s}^{2n} \left(M_{\theta}^{-1} \cdot \exp \left(-M_{\theta}^{s-2} (\theta_{t(0)}^{s-2}) \right)^{-\frac{1}{2}(\theta_{t(0)}^{s-2} - M_{\theta}^{-1})^2}, M_{\theta}^{-1} \cdot \exp \left(-M_{\theta}^{s-2} (\theta_{t(\pi)}^{s-2}) \right)^{-\frac{1}{2}(\theta_{t(\pi)}^{s-2} - M_{\theta}^{-1})^2} \right) \quad (51)$$

$$\begin{aligned} & \int \left[\frac{\sqrt{2\pi}(s-2)(s-3)}{(n-m)-2} \cdot \rho_{\Lambda}^{(n-m)-3} \begin{bmatrix} \theta_{ij} \\ \theta_{(i+1)(j+2)} \\ \dots \end{bmatrix}_{\text{Matrix}} \right]_{\text{柔性神经网络}} d\theta \\ &= \left(M_{\theta}^{-1} \cdot \exp \left(-M^{s-2} (\theta_{t(0)}^{s-2}) \right)^{-\frac{1}{2}(\theta_{t(0)}^{s-2} - M_{\theta}^{-1})^2}, M_{\theta}^{-1} \cdot \exp \left(-M^{s-2} (\theta_{t(\pi)}^{s-2}) \right)^{-\frac{1}{2}(\theta_{t(\pi)}^{s-2} - M_{\theta}^{-1})^2} \right), \text{ and if } n \rightarrow m \\ &= \left(M_{\theta}^{-1} \cdot \exp \left(-M^{s-2} (\theta_{t(0)}^{s-2}) \right)^{-\frac{1}{2}(\theta_{t(0)}^{s-2} - M_{\theta}^{-1})^2} \oplus M_{\theta}^{-1} \cdot \exp \left(-M^{s-2} (\theta_{t(\pi)}^{s-2}) \right)^{-\frac{1}{2}(\theta_{t(\pi)}^{s-2} - M_{\theta}^{-1})^2} \right) \\ &= M_{\theta}^{-1} \cdot \left(\exp \left(-M^{s-2} (\theta_{t(0)}^{s-2}) \right)^{-\frac{1}{2}(\theta_{t(0)}^{s-2} - M_{\theta}^{-1})^2} \oplus \exp \left(-M^{s-2} (\theta_{t(\pi)}^{s-2}) \right)^{-\frac{1}{2}(\theta_{t(\pi)}^{s-2} - M_{\theta}^{-1})^2} \right) \\ &= M_{\theta}^{-1} \cdot \left(\exp \left[\left(-M^{s-2} (\theta_{t(0)}^{s-2}) \right)^{-\frac{1}{2}(\theta_{t(0)}^{s-2} - M_{\theta}^{-1})^2} \times \left(-M^{s-2} (\theta_{t(\pi)}^{s-2}) \right)^{-\frac{1}{2}(\theta_{t(\pi)}^{s-2} - M_{\theta}^{-1})^2} \right] \right) \\ &= M_{\theta}^{-1} \cdot \left(\exp \left[\left(-M^{s-2} (\theta_{t(0,\pi)}^{s-2}) \right)^{-\frac{1}{2}(\theta_{t(0,\pi)}^{s-2} - M_{\theta}^{-1})^2} \right] \right), \text{ and if } 0 \rightarrow \pi \\ &= M_{\theta}^{-1} \cdot \left(\exp \left[\left(-M^{s-2} (\theta_{t(0,\pi)}^{s-2}) \right)^{-(\theta_{t(0,\pi)}^{s-2} - M_{\theta}^{-1})^2} \right] \right), \text{ and if } 0 \rightarrow \pi \\ & \int \int \left[\frac{\sqrt{2\pi}(s-2)(s-3)}{(s-2)(s-3)} \cdot \rho_{\Lambda}^{(n-m)-3} \begin{bmatrix} \theta_{ij} \\ \theta_{(i+1)(j+2)} \\ \dots \end{bmatrix}_{\text{Matrix}} \right]_{\text{柔性神经网络}} d\theta d\rho \\ & \rightarrow \int_{\partial M} \exp \left(-M^{s-2} (\theta_{t(0,\pi)}^{s-2}) \right)^{-(\theta_{t(0,\pi)}^{s-2} - M_{\theta}^{-1})^2 M_{\theta}^{-1}} \\ & \int \int \left[\sqrt{2\pi} \cdot \rho_{\Lambda}^{(s-2)(s-3)} \begin{bmatrix} \theta_{ij} \\ \theta_{(i+1)(j+2)} \\ \dots \end{bmatrix}_{\text{Matrix}} \right]_{\text{柔性神经网络}} d\theta d\rho \rightarrow \int_{\partial M} \exp \left(-M^{s-2} (\theta_{t(0,\pi)}^{s-2}) \right)^{-(\theta_{t(0,\pi)}^{s-2} - M_{\theta}^{-1})^2 M_{\theta}^{-1}} \quad (52) \end{aligned}$$

iii. 上式为半弧形超曲面, 携带类脑重核边缘生成序列特征的高维度拓扑空间 KFNN 柔性神经网络群动态分布结构。从 AI 数模风控医疗大设备内部大数据的高维度信息的极坐标系统, 可以将上式扩展其角度的范围, 即 $(0, \pi) \rightarrow k(0, 2\pi)$, 则上式改写为

$$\int \int \left[\sqrt{2\pi} \cdot \rho_{\Lambda}^{(s-2)(s-3)} \begin{bmatrix} \theta_{ij} \\ \theta_{(i+1)(j+2)} \\ \dots \end{bmatrix}_{\text{Matrix}} \right]_{\text{柔性神经网络}} d\theta d\rho \rightarrow \int_{\partial M} \exp \left(-M^{s-2} (\theta_{t(0,2k\pi)}^{s-2}) \right)^{-(\theta_{t(0,2k\pi)}^{s-2} - M_{\theta}^{-1})^2 M_{\theta}^{-1}} \quad (53)$$

$$\begin{cases} K = 1 - i \cdot \frac{\lambda_i [KER_p^{i \cdot (\sin, \cos)^2}]^{s-1}}{S^2} - i^2 \frac{\lambda_{i+1} [KER_p^{i \cdot (\sin, \cos)^2}]^{s-2}}{S^2} + i^3 \cdot \frac{\lambda_{i+2} [KER_p^{i \cdot (\sin, \cos)^2}]^{s-3}}{S^2} - \dots \\ K = 1 - \frac{\lambda_i [KER_p^{i \cdot (\cos, -\sin)^2}]^{s-1}}{S^2} - \frac{\lambda_{i+1} [KER_p^{i \cdot (\cos, -\sin)^2}]^{s-2}}{S^2} + \frac{\lambda_{i+2} [KER_p^{i \cdot (\cos, -\sin)^2}]^{s-3}}{S^2} - \dots \end{cases}$$

$$, \text{ and } KER_P^{i \cdot (Sin, Cos)^2} = \left[Sin^2 \left(\sum_{i=2}^m A_i + \sum_{i=1}^m i \cdot \frac{A_i}{2} \right) + Cos^2 \left(\sum_{i=2}^m B_i + \sum_{i=1}^m i \cdot \frac{B_i}{2} \right) \right] \quad (54)$$

. 重核 RBF 特征空间超球体的核函数泰勒级数展开与重核超球强化 TANH 平衡态透镜效应的融合计算数学模型, 其图像如下:



Fig54. 重核超球强化 TANH 平衡态透镜效应的 RBF 特征空间复变超球体核函数的泰勒级数展开图

$$\begin{array}{ccc}
 \begin{array}{c} 1 - \sum \left[i^n \cdot \frac{\lambda_i \left[KER_P^{i \cdot (Sin, Cos)^2} \right]^{s-1}}{S^2} \right] \\ \text{KFNN} \\ KER_P^{i \cdot (Sin, Cos)^2} \end{array} & \xleftrightarrow{\text{同胚}} & \begin{array}{c} 1 + \sum \left[i^n \cdot \frac{\lambda_i \left[KER_P^{i \cdot (Sin, Cos)^2} \right]^{s-1}}{S^2} \right] \\ \text{KFNN} \\ KER_P^{i \cdot (Sin, Cos)^2} \end{array} \\
 \downarrow \text{同调} & & \downarrow \text{同调} \\
 \begin{array}{c} \text{KFNN} \int_{\partial M} \exp \left(-M^{s-2} \left(\theta_{t(0,2k\pi)}^{s-2} \right) \right)^{-\left(\theta_{t(0,2k\pi)}^{s-2} - M_{\theta}^{-1} \right)^{2M_{\theta}^{-1}}} \\ KER_P^{i \cdot (Sin, Cos)^2} \end{array} & \xleftrightarrow{\text{同胚}} & \begin{array}{c} \int \int \left[\sqrt{2\pi} \cdot \rho_{\Lambda}^{(s-2)(s-3)} \right] \left[\begin{array}{c} \theta_{ij} \\ \theta_{(i+1)(j+2)} \\ \dots \text{Matrix} \end{array} \right] d\theta d\rho \\ \text{KFNN} \\ KER_P^{i \cdot (Sin, Cos)^2} \end{array} \\
 & & \text{柔性神经网络} \\
 \int \int \left[\sqrt{2\pi} \cdot B_{\Lambda}^{(s-2)(s-3)} \right] \left[\begin{array}{c} A_{ij} \\ A_{(i+1)(j+2)} \\ \dots \text{Matrix} \end{array} \right] dAdB & & \\
 \rightarrow i^2 \frac{\lambda_{i+1} \left[\left[Sin^2 \left(\sum_{i=2}^m A_i + \sum_{i=1}^m i \cdot \frac{A_i}{2} \right) + Cos^2 \left(\sum_{i=2}^m B_i + \sum_{i=1}^m i \cdot \frac{B_i}{2} \right) \right]^{s-2} \right]}{S^2} \otimes i^3 & & \\
 \cdot \frac{\lambda_{i+2} \left[\left[Sin^2 \left(\sum_{i=2}^m A_i + \sum_{i=1}^m i \cdot \frac{A_i}{2} \right) + Cos^2 \left(\sum_{i=2}^m B_i + \sum_{i=1}^m i \cdot \frac{B_i}{2} \right) \right]^{s-3} \right]}{S^2} & & \\
 \int \int \left[\sqrt{2\pi} \cdot B_{\Lambda}^{(s-2)(s-3)} \right] \left[\begin{array}{c} A_{ij} \\ A_{(i+1)(j+2)} \\ \dots \text{Matrix} \end{array} \right] dAdB & & \\
 \rightarrow i^n \cdot \frac{\theta_{ij} \times \left[\left[Sin^2 \left(\sum_{i=2}^m A_i + \sum_{i=1}^m i \cdot \frac{A_i}{2} \right) + Cos^2 \left(\sum_{i=2}^m B_i + \sum_{i=1}^m i \cdot \frac{B_i}{2} \right) \right]^{(s-2)(s-3)} \right]}{S^{2n}} & & (55)
 \end{array}$$

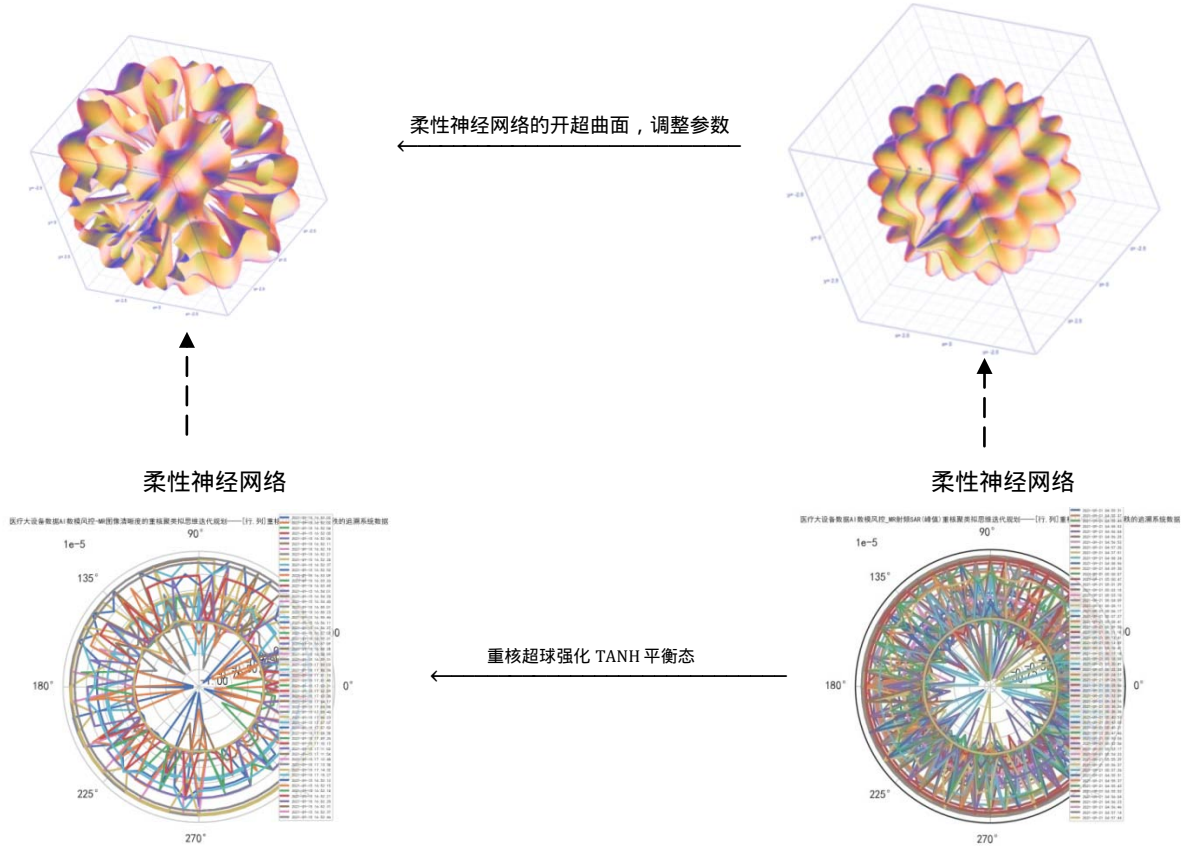


Fig55. 核超球强化 TANH 平衡态透镜效应的 RBF 特征空间复变超球体核函数的泰勒级数展开, 形成 RLLM 多模态思维增强收缩参数群、尺度生成式人工智能的柔性神经网络生成高维分析图

从重核超球强化 TANH 平衡态透镜效应的 RBF 特征空间复变超球体核函数的泰勒级数展开, 到柔性神经网络的开超曲面, 即携带类脑重核边缘生成序列特征的高维度拓扑空间开超曲面的 KFNN 柔性神经网络群动态分布结构。

$$\begin{aligned}
 & \int_{\partial M} \exp \left(-M^{s-2} \left(\theta_{t(0,2k\pi)}^{s-2} \right) \right) \left(\theta_{t(0,2k\pi)}^{s-2} - M_{\partial}^{-1} \right)^{2M_{\partial}^{-1}} \\
 & \quad \rightarrow i^n \\
 & \quad \cdot \frac{\vartheta_{ij} \times \left[\left[\sin^2 \left(\sum_{i=2}^m A_i(M, \theta) + \sum_{i=1}^m i \cdot \frac{A_i(M, \theta)}{2} \right) + \cos^2 \left(\sum_{i=2}^m B_i(\theta, M) + \sum_{i=1}^m i \cdot \frac{B_i(\theta, M)}{2} \right) \right] \right]^{(s-2)(s-3)}}{S^{2n}}
 \end{aligned} \tag{56}$$

7.1.4 从携带调和邻域覆盖双全纯函数映照微颤类群调和函数限制性多变量热核, 至黎曼空间到高维重核边界生成序列空间、思维约化正交群中 $O(I, \bar{I})$ 变化

$$\left\{ \begin{array}{l} \text{携带调和邻域覆盖微颤热核} \\ \text{重核边界生成序列} \end{array} \right. \rightarrow \sum_{\omega=S}^{2n} \left(M_{\partial}^{-1} \cdot \exp \left(-M_{\partial}^{s-2} \left(\theta_{t(0)}^{s-2} \right) \right)^{\frac{1}{2} \left(\theta_{t(0)}^{s-2} - M_{\partial}^{-1} \right)^2} \right) \\
 \left\{ \begin{array}{l} \text{携带调和邻域覆盖微颤热核} \\ \text{重核边界生成序列} \end{array} \right. \rightarrow \sum_{\omega=S}^{2n} \left(M_{\partial}^{-1} \cdot \exp \left(-M_{\partial}^{s-2} \left(\theta_{t(\pi)}^{s-2} \right) \right)^{\frac{1}{2} \left(\theta_{t(\pi)}^{s-2} - M_{\partial}^{-1} \right)^2} \right)
 \end{array} \tag{57}$$

具有《类叠丛花瓣型微细纤维丛》调和邻域覆盖双全纯函数映照(对合函数类群)《RongrongZhu 类邻域覆盖微颤结构类群调和函数》的传统微积分无穷微分结构函数_限制性多变量热核偏微分退化 $\rho/(x,y)^2 \text{Sec}^2(x,y)$ 的直角坐标系方程。

$$\left\{ \begin{aligned} Z_{\left[\left(g_{c(n)}^{k-}, a_{c(n-2)} \right), \left(g_{c(n)}^{k-1}, a_{c(n-1)} \right) \right]} &= 4 \cdot \frac{1}{\lambda+1} \cdot \frac{\rho}{\left[\cos \left[2 \left(e^{i \left(g_{c(n)}^{k-}, a_{c(n-2)} \right)} \cdot \left(1 \pm i^2 \cdot \left(g_{c(n)}^{k-1}, a_{c(n-1)} \right)^2 \right) \right) \right] \mp \sin \left[2 \left(e^{-i \left(g_{c(n)}^{k-}, a_{c(n-2)} \right)} \cdot \left(1 \pm i^2 \cdot \left(g_{c(n)}^{k-1}, a_{c(n-1)} \right)^2 \right) \right) \right] \right]^2} \times \\ &\quad \text{Sec}^2 \left[\cos \left[2 \left(e^{i \left(g_{c(n)}^{k-}, a_{c(n-2)} \right)} \cdot \left(1 \pm i^2 \cdot \left(g_{c(n)}^{k-1}, a_{c(n-1)} \right)^2 \right) \right) \right] \mp \sin \left[2 \left(e^{-i \left(g_{c(n)}^{k-}, a_{c(n-2)} \right)} \cdot \left(1 \pm i^2 \cdot \left(g_{c(n)}^{k-1}, a_{c(n-1)} \right)^2 \right) \right) \right] \right] \\ , \text{ and } \prod_{\lambda=1}^{\beta+1} (4e^{i\theta} - 4e^{-i\theta}) &\rightarrow 4 \cdot \frac{1}{\lambda+1}, \quad \lambda \equiv \text{const.} \\ \xrightarrow[\text{数学软件形式}]{\text{化简至}} \\ Z(x,y) &= 4 \cdot \frac{1}{\lambda+1} \cdot \frac{\rho}{\left[\cos \left(2 \left(e^{ix} \cdot \left(1 \pm i^2 \cdot y^2 \right) \right) \right) \mp \sin \left(2 \left(e^{-ix} \cdot \left(1 \pm i^2 \cdot y^2 \right) \right) \right) \right]^2} \times \text{Sec}^2 \left[\cos \left(2 \left(e^{ix} \cdot \left(1 \pm i^2 \cdot y^2 \right) \right) \right) \mp \sin \left(2 \left(e^{-ix} \cdot \left(1 \pm i^2 \cdot y^2 \right) \right) \right) \right] \\ , \text{ and } \prod_{\lambda=1}^{\beta+1} (4e^{ix} - 4e^{-ix}) &\rightarrow 4 \cdot \frac{1}{\lambda+1}, \quad \lambda \equiv \text{const.} \end{aligned} \right.$$

(58)

交换群函数 $g(\alpha_i)$ ，是否在正交群 $O(I, \bar{I})$ 时，存在 $\langle IV, \overline{UI} \rangle \rightarrow \langle I, \bar{I} \rangle$ 空间的覆盖现象，即思维归纳法

$\mu_i \langle g(\alpha_i), \overline{UI} \rangle \rightarrow \mu_i \langle I, \bar{I} \rangle$ 至 $O(I, \bar{I}) \leftarrow \mu_i \langle I, \bar{I} \rangle$ 。调和邻域覆盖的双全纯函数映照微颤类群调和函数限制性多变量热核，及高维重核边界生成序列空间的变化。

$$\left\{ \begin{aligned} G(g_{nn}, \mu_i \langle I, \bar{I} \rangle)_{\langle s_i^V, \lambda_{i++}^i \rangle} &\left(\sum_{\pi i, \wp(c_{ji})}^{\Delta \theta_i} \left(U_{i; i} \left(\text{Deg}_{\wp(c_{ji})}^{\theta_i} \right) \right) \right)^{-1} \rightsquigarrow \sum_{\omega=S}^{2n} \left(M_{\theta}^{-1} \cdot \exp \left(-M_{\theta}^{S-2} (\theta_{t(0)}^{S-2}) \right)^{-\frac{1}{2} (\theta_{t(0)}^{S-2} - M_{\theta}^{-1})^2} \right) \\ G(g^{nn}, \mu_i \langle g(\alpha_i), \overline{UI} \rangle)_{\langle s_i^V, \lambda_{i++}^i \rangle} &\left(\sum_{\pi i, \wp(c_{ji})}^{\Delta \theta_i} \left(U_{i; i} \left(\text{Deg}_{\wp(c_{ji})}^{\theta_i} \right) \right) \right)^{-1} \rightsquigarrow \sum_{\omega=S}^{2n} \left(M_{\theta}^{-1} \cdot \exp \left(-M_{\theta}^{S-2} (\theta_{t(\pi)}^{S-2}) \right)^{-\frac{1}{2} (\theta_{t(\pi)}^{S-2} - M_{\theta}^{-1})^2} \right) \end{aligned} \right. \quad (59)$$

$$\left\{ \begin{aligned} G(g_{nn}, \mu_i \langle I, \bar{I} \rangle)_{\langle s_i^V, \lambda_{i++}^i \rangle} &\left(\sum_{\pi i, \wp(c_{ji})}^{\Delta \theta_i} \left(U_{i; i} \left(\text{Deg}_{\wp(c_{ji})}^{\theta_i} \right) \right) \right)^{-1} \rightsquigarrow (g_{c(n)}^{k-})^{-1}, a_{c(n-2)} \\ G(g^{nn}, \mu_i \langle g(\alpha_i), \overline{UI} \rangle)_{\langle s_i^V, \lambda_{i++}^i \rangle} &\left(\sum_{\pi i, \wp(c_{ji})}^{\Delta \theta_i} \left(U_{i; i} \left(\text{Deg}_{\wp(c_{ji})}^{\theta_i} \right) \right) \right)^{-1} \rightsquigarrow (g_{c(n)}^{k-}, a_{c(n-1)}) \end{aligned} \right. \quad (60)$$

思维约化的黎曼空间，一直与生成序列空间和调和邻域覆盖双全纯映照空间相关；特别是它们都携带重核或热核的结构形态，只不过在调和空间上存在覆盖空间的智能表示，形成科学规则、边界规划的无监督自动分析，最后形成强思维推理机制[在特定的可浅度、深度搜索空间，维度也特别高]；并形成减速分解的慢思维形态。

交换群 $g(\alpha_i)$ 覆盖空间，存在于 $g^{nn} \langle g(\alpha_i) \rangle$ ，为智能无监督空间；与

$$\langle g_{c(n)}^{k-} \wedge g_{c(n)-1}^{k-} \rangle \rightsquigarrow g_{c(n)}^{kk} \langle a_{c(n-1)} \diamond a_{c(n-2)} \rangle$$

的调和邻域覆盖的双全纯空间，与黎曼空间相似。如果

$$g^{nm} \langle g(\alpha_i) \rangle \wedge g_{mm}^{c(n)} \langle a_{c(n-1)} \diamond a_{c(n-2)} \rangle \rightsquigarrow O_i \langle I, \bar{I} \rangle \quad (61)$$

成为具有覆盖黎曼矢量空间思维约化形态的自动化推理机制。 $\langle g(\alpha_i), a_{c(n-1)} \rangle \vee \langle g(\alpha_j), a_{c(n-2)}^{-1} \rangle$ 在黎曼交换群下的重核生成序列与调和邻域对生成序列的科学规划。而黎曼交换群下的规划圆域生成序列,称为智能黎曼规划。

$$\langle g(\alpha_i) \vee g_{-1}(\beta_j) \rangle^2$$

将上式推广到高维度思维约化孪生智能黎曼矢量空间，则有

$$\sum_{n,m}^k \langle (g^{nm}(\alpha_i)) \vee i^2 \cdot (g_{mm}(\beta_i)) \rangle^2 \rightsquigarrow O_i^{i^2:s} \langle I, \bar{I} \rangle \quad (62)$$

黎曼空间下半监督多视图度量学习方法

度量学习旨在从数据中自动学习得到一种合适的度量，在人脸识别、信息检索、网络链接预测等领域得到广泛应用。数据呈现出高维、多源异构和极弱监督的特性，这使得学习快速有效的距离度量变得困难，同时给传统机器学习、模式识别等领域的智能信息处理带来了前所未有的挑战。对强监督信息和欧氏空间的高度依赖是当前度量学习研究存在的普遍问题，这将导致现有的学习模型和算法在实际应用中的适用范围受到很大程度的局限。

弱监督标注环境和非欧空间下数据的流形分布，提高弱监督异质数据度量学习的性能

黎曼空间下的半监督多视图度量学习方法，旨在克服对强监督信息和欧氏空间的高度依赖。能够准确刻画弱监督标注环境和非欧空间下数据的流形分布，提高弱监督异质数据度量学习的性能。

$$\left\{ \begin{aligned} Z_{\left[\left(g_{c(n)}^{k-}, a_{c(n-2)} \right) \wedge \left(g_{c(n)}^{k-1}, a_{c(n-1)} \right) \right]} &= 4 \cdot \frac{1}{\lambda + 1} \cdot \frac{\rho}{\left[\cos \left[2 \left(e^{i(g_{c(n)}^{k-}, a_{c(n-2)})} \cdot (1 \pm i^2 \cdot (g_{c(n)}^{k-1}, a_{c(n-1)})^2) \right) \right] \mp \sin \left[2 \left(e^{-i(g_{c(n)}^{k-}, a_{c(n-2)})} \cdot (1 \pm i^2 \cdot (g_{c(n)}^{k-1}, a_{c(n-1)})^2) \right) \right] \right]^2} \times \\ &\quad \sec^2 \left[\cos \left[2 \left(e^{i(g_{c(n)}^{k-}, a_{c(n-2)})} \cdot (1 \pm i^2 \cdot (g_{c(n)}^{k-1}, a_{c(n-1)})^2) \right) \right] \mp \sin \left[2 \left(e^{-i(g_{c(n)}^{k-}, a_{c(n-2)})} \cdot (1 \pm i^2 \cdot (g_{c(n)}^{k-1}, a_{c(n-1)})^2) \right) \right] \right] \\ \text{, and } \prod_{\lambda=1}^{\beta+1} (4e^{i\theta} - 4e^{-i\theta}) &\rightarrow 4 \cdot \frac{1}{\lambda + 1}, \quad \lambda \equiv \text{const.} \\ \xrightarrow[\text{数学符号形式}]{\text{化简至}} & \\ Z(x, y) &= 4 \cdot \frac{1}{\lambda + 1} \cdot \frac{\rho}{\left[\cos \left(2 \left(e^{i \cdot x} \cdot (1 \pm i^2 \cdot y^2) \right) \right) \mp \sin \left(2 \left(e^{-i \cdot x} \cdot (1 \pm i^2 \cdot y^2) \right) \right) \right]^2} \times \sec^2 \left[\cos \left(2 \left(e^{i \cdot x} \cdot (1 \pm i^2 \cdot y^2) \right) \right) \mp \sin \left(2 \left(e^{-i \cdot x} \cdot (1 \pm i^2 \cdot y^2) \right) \right) \right] \\ \text{, and } \prod_{\lambda=1}^{\beta+1} (4e^{ix} - 4e^{-ix}) &\rightarrow 4 \cdot \frac{1}{\lambda + 1}, \quad \lambda \equiv \text{const.} \end{aligned} \right.$$

重核聚类高维科学数据投影情况

孪生智能及强推理

高维重核边界生成序列正态概率

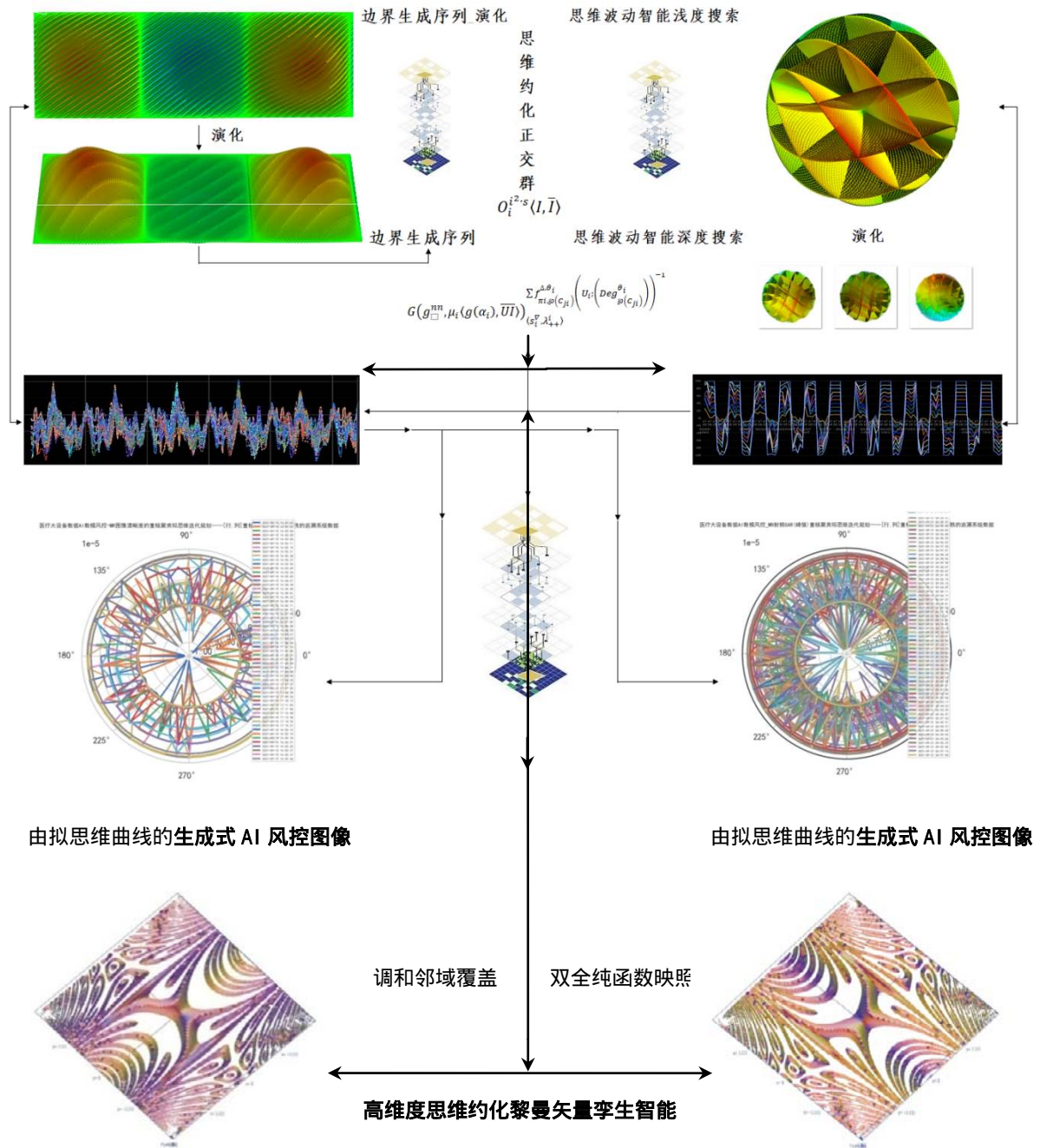


Fig56. 重核聚类高维科学数据投影、高维重核边界生成序列正态概率的孪生智能及强推理《类叠丛花瓣型微细纤维丛》调和邻域覆盖的双全纯函数映照限制性多变量热核偏微分退化

在更高维度上感知 MR 信息场的波动规律； ω_i 为角速度($\omega_i = TR \otimes TE$)高频波角速度： $\omega_i(\delta^{-1})$ ，携带图像信息的高频波

$$\omega_i^{-1}(\delta) \times \log \left(H_{ij} \times Q_{MR}^{\text{核心能量}} \times H_{ji}^H \right) = \frac{\log \left(H_{ij} \times Q_{MR}^{\text{核心能量}} \times H_{ji}^H \right)}{\omega_i(\delta)}$$

$$\frac{\theta}{\rho(t)} = \frac{\log \left(H_{ij} \times Q_{MR}^{\text{核心能量}} \times H_{ji}^H \right)}{\omega_i(\delta)}, \quad \theta \times \omega_i(\delta) = \rho(t) \times \log \left(H_{ij} \times Q_{MR}^{\text{核心能量}} \times H_{ji}^H \right)$$

$$\begin{aligned}
& \Omega^{k+1} \left(\theta \cdot \rho_t \left(Q_{MR}^{\text{核心能量}} \right) \right) \rightarrow \frac{1}{(k+1)k(k-1) \dots} \times S_{Left, right}^{m+k-1}(\theta_t^k)_{\rho \rightarrow \delta} \\
& \theta = \frac{\rho(t)}{\omega_i(\delta)} \times \log \left(H_{ij} \times Q_{MR}^{\text{核心能量}} \times H_{ji}^H \right) \text{ 代入上式, 则} \\
& \frac{1}{(k+1)k(k-1) \dots} \times S_{Left, right}^{m+k-1} \left(\frac{\rho(t)}{\omega_i(\delta)} \times \log \left(H_{ij} \times Q_{MR}^{\text{核心能量}} \times H_{ji}^H \right) \right)_{\partial}^k, \text{ and if } m \rightarrow 0, t', \text{ then} \\
& \left[S_{Left}^{-k} S_{\partial^2 M}^{-k} \left(\theta^k(t') \right) \wedge S_{right}^{-k} S_{\partial^2 M}^{-k} \left(\beta^k(t') \right) \right] \\
& = \frac{1}{(k+1)k(k-1) \dots} \times S_{Left, right}^{m+k-1} \left(\frac{\rho(t)}{\omega_i(\delta)} \times \log \left(H_{ij} \times Q_{MR}^{\text{核心能量}} \times H_{ji}^H \right) \right)_{\partial}^k \quad (63)
\end{aligned}$$

上式(63)为携带图像信息场的高频波降维过程的函数方程。

.KFDNN 在神经网络训练、学习时, 存在降维过程(梯度下降)

.若 $\omega_i(\delta)$ 高频波与类脑(人脑)波存在某种低频率协振动共振时, 会使人脑产生不舒服, 即

$$\begin{aligned}
& \frac{(k+1)k(k-1) \dots}{\omega_i(\delta^{-1})} \times (S^{-k+1}), \rightarrow \frac{\omega_i(\delta)}{(k+1)k(k-1) \dots} \times S_{Left, right}^{k-1} \left(Q_{MR}^{\text{核心能量}} \right) \\
& \frac{\omega_i(TR \otimes TE)}{(k+1)k(k-1) \dots} \times S_{Left, right}^{k-1} \left(Q_{MR}^{\text{核心能量}} \right)_{\delta}^H
\end{aligned}$$

上面函数结构为携带图像信息的低频协振动共振波形态

$$S_{Left, right}^{-k+1} \left(Q_{MR}^{\text{核心能量}} \right)_{\delta}^H = \frac{\omega_i^{-1}(TR \otimes TE)}{(k+1)k(k-1) \dots} \times \left[\cos \left(\sum_{i=2}^m \theta_i + \sum_{i=2}^m i \cdot \frac{\theta_i}{2} \right) - \cos \left(\sum_{i=2}^m \beta_i + \sum_{i=2}^m i \cdot \frac{\beta_i}{2} \right) \right],$$

and $\delta \rightarrow 1$, or $\delta \rightarrow -\infty$ (31)

$$S_{Left, right}^{-k+1} \left(Q_{MR}^{\text{核心能量}} \right)_{\delta}^H = \frac{\left(\frac{1}{4} \right)^n}{(k+1)k(k-1) \dots} \times \left[\sin \left(\theta_i + \sum_{i=2}^m \theta_i + n \cdot \frac{\pi}{4} \right) + \sin \left(\theta_i - \sum_{i=2}^m \theta_i + n \cdot \frac{\pi}{4} \right) \right],$$

$$\frac{(k+1) + k(k-1) + \dots}{\left(\frac{1}{4} \right)^n \times (k+1)k(k-1) \dots \times \omega_i(TR \otimes TE)} = \frac{\left[\sin \left(\theta_i + \sum_{i=2}^m \theta_i + n \cdot \frac{\pi}{4} \right) - \sin \left(\theta_i - \sum_{i=2}^m \theta_i + n \cdot \frac{\pi}{4} \right) \right]}{\left[\cos \left(\sum_{i=2}^m \theta_i + \sum_{i=2}^m i \cdot \frac{\theta_i}{2} \right) - \cos \left(\sum_{i=2}^m \beta_i + \sum_{i=2}^m i \cdot \frac{\beta_i}{2} \right) \right]}$$

$$\frac{(k+1) + k(k-1) + \dots}{\omega_i(TR \otimes TE)} \simeq \frac{\left[\sin \left(\theta_i + \sum_{i=2}^m \theta_i + n \cdot \frac{\pi}{4} \right) + \sin \left(\theta_i - \sum_{i=2}^m \theta_i + n \cdot \frac{\pi}{4} \right) \right]}{\left[\cos \left(\sum_{i=2}^m \theta_i + \sum_{i=2}^m i \cdot \frac{\theta_i}{2} \right) - \cos \left(\sum_{i=2}^m \beta_i + \sum_{i=2}^m i \cdot \frac{\beta_i}{2} \right) \right]}$$

$$\frac{1}{\omega_i(TR \otimes TE)} \xrightarrow{\text{约化}} \frac{\left[\sin \left(\theta_i + \sum_{i=2}^m \theta_i + n \cdot \frac{\pi}{4} \right) + \sin \left(\theta_i - \sum_{i=2}^m \theta_i + n \cdot \frac{\pi}{4} \right) \right]}{\lambda_i \left[\cos \left(\theta_i + \sum_{i=2}^m \theta_i \right) - \sin \left(\theta_i - \sum_{i=2}^m \theta_i + n \cdot \frac{\pi}{4} \right) \right]} \times \text{tg} \left(\sum \theta_i \right)$$

$$\frac{1}{\omega_i(TR \otimes TE)} = \text{ctg} \left(\sum_{i=2}^m i \cdot \frac{\theta_i}{2} \right), \therefore$$

$$S_{Left, right}^{-k+1} \left(Q_{MR}^{核心能量} \right)_{\delta}^H = ctg \left(\sum_{i=2}^m i \cdot \frac{\theta_i}{2} \right)_{E_X} \quad (64)$$

下图(公式(64))为携带图像信息的低频协振动的约化共振波形态方程的三维图像的类脑(人脑左、右

$$脑) S_{Left, right}^{-k+1} \left(Q_{MR}^{核心能量} \right)_{\delta}^H$$

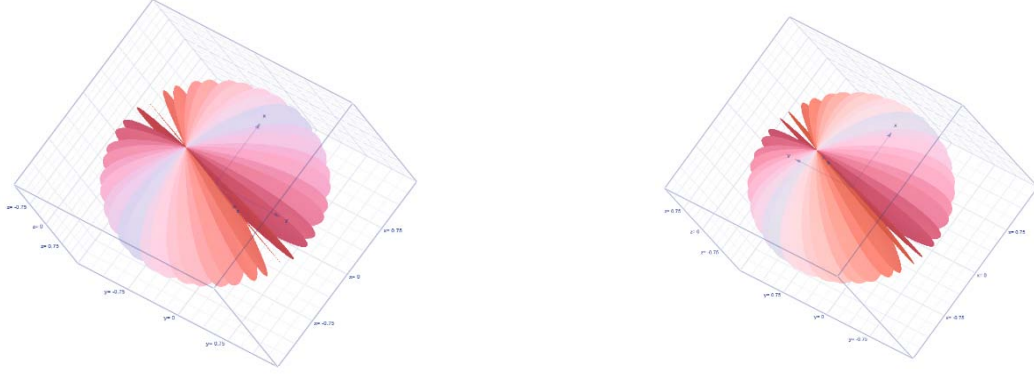


Fig57.携带图像信息的低频协振动的约化共振波形态方程的三维图像的类脑(人脑左、右脑) $S_{Left, right}^{-k+1} \left(Q_{MR}^{核心能量} \right)_{\delta}^H$

$$S_{Left, right}^{-k+1} \left(Q_{MR}^{核心能量} \right)_{\delta}^H = ctg \left(\sum_{i=2}^m i \cdot \frac{\theta_i}{2} \right)_{E_X},$$

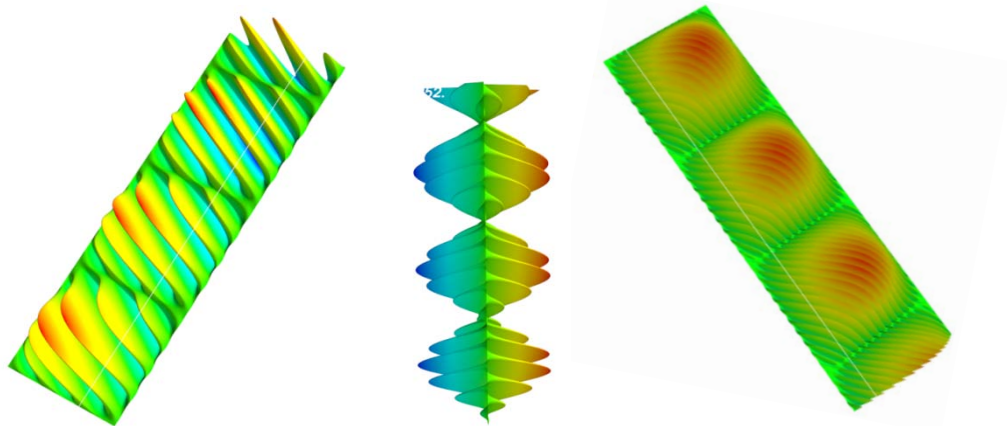
$$\omega_i (TR \otimes TE) = \sin \left(\sum_{i=2}^m i \cdot \frac{\theta_i}{2}, \sum_{j=2}^m j \cdot \frac{\beta_j}{2} \right)_{E_X} / \cos \left(\sum_{i=2}^m i \cdot \frac{\theta_i}{2}, \sum_{j=2}^m j \cdot \frac{\beta_j}{2} \right)_{E_X}$$

, and $\omega_i (TR)$ 重复时间, $\omega_i (TE)$ 回波时间

$$\begin{aligned} & \sin \left(\sum_{i=2}^m i \cdot \frac{\theta_i}{2}, \sum_{j=2}^m j \cdot \frac{\beta_j}{2} \right)_{E_X} \times \cos^{-1} \left(\sum_{i=2}^m i \cdot \frac{\theta_i}{2}, \sum_{j=2}^m j \cdot \frac{\beta_j}{2} \right)_{E_X} \\ &= \omega_i \left(\sum_{i=2}^m i \cdot \frac{\theta_i}{2}, \sum_{j=2}^m j \cdot \frac{\beta_j}{2} \right) \times \omega_i^{-1} \left(\sum_{i=2}^m i \cdot \frac{\theta_i^*}{2}, \sum_{j=2}^m j \cdot \frac{\beta_j^*}{2} \right) \end{aligned}$$

$$\omega_i (TR \otimes TE) \rightsquigarrow \omega_i (TR/TE), \omega_i (TR/TE) \rightsquigarrow \sin \left(\sum_{i=2}^m i \cdot \frac{\theta_i}{2}, \sum_{j=2}^m j \cdot \frac{\beta_j}{2} \right)_{E_X} \times \cos \left(\sum_{i=2}^m i \cdot \frac{\theta_i^*}{2}, \sum_{j=2}^m j \cdot \frac{\beta_j^*}{2} \right)_{E_X}$$

, and $\omega_i (TR)$ 重复时间, $\omega_i (TE)$ 回波时间



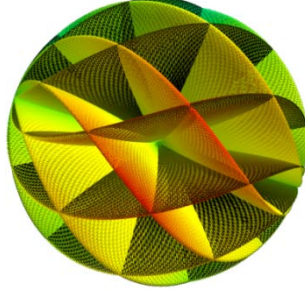


Fig58.携带图像信息的低频协振动的约化共振波 $\omega_i (TR \otimes TE) \rightsquigarrow \omega_i (TR/TE)$ 内蕴重复时间、回拨时间形态方程的

三维图像的类脑 $S_{Left, right}^{-k+1} \left(Q_{MR}^{\text{核心能量}} \right)_\delta^H$

左、右脑(类脑)内核协同与携带信息约化波动形态的拟合方程的变换

$$+ \Omega_{t'(\theta \wedge \beta)}^{(S_{\partial M}^{-1})^k} (\theta^k \wedge \beta^k) \sim \sum_{k \geq 3}^m S_{Left, right}^{-k+1} \left(Q_{MR}^{\text{核心能量}} \right)_\delta^H, \text{ if } S_{Left, right}^{-k+1} \subset ctg \left(\sum_{i=2}^m i \cdot \frac{\theta_i}{2} \right)_{E_X} \quad (65)$$

每一个约化 S^{-1} 片上存储着大量信息,包括类似 MR 图像信息碎片等,从整体看类脑(人脑)存储的海量信息的高维度数据,并存在提取信息的密钥群高 1 维度信息,这叫高维度信息的分配表群,相当于密钥群的生成序列,所以将 $S_{Left}^{m+k-1} \left(+ \Omega_{t'(\theta \wedge \beta)}^{(S_{\partial M}^{-1})^k} (\theta^k \wedge \beta^k) \right) \cong \Omega_M^{k+1} [\theta(\rho(t))]_{S_{Left, right}^{m+k-1}}$ 简化为

$$S_{Left, right}^{m+k-1} \left(\sum_{k \geq 3}^m S_{Left, right}^{-k+1} \left(Q_{MR}^{\text{核心能量}} \right)_\delta^H \right) \sim S_{Left, right}^{m+k-1} \left(\sum_{k \geq 3}^m ctg^s \left(\sum_{i=2}^m i \cdot \frac{\theta_i}{2} \right)_{E_X(t')}^{Q_{MR}} \right), \text{ and } s \text{ 表示维度}$$

$$S_{Left, right}^{m+k-1} \left(\sum_{k \geq 3}^m S_{Left, right}^{-k+1} \left(Q_{MR}^{\text{核心能量}} \right)_\delta^H \right) \sim S_{Left, right}^{m+k-1} \left(\sum_{k \geq 3}^m ctg^s \left(\sum_{\rho=2}^m \rho_\theta \cdot \frac{\theta_\rho(t')}{2} \right)_{E_X(t')}^{Q_{MR}} \right), \text{ and}$$

$s \geq 3$ 表示维度, $\rho(t')$ 为极坐标的极径, t' 为时间切线 (66)

- ④ 密钥群生成序列 $(+ \Omega_{t'(\theta)}^{S_{\partial M}^{-1}} \wedge - \Omega_{t'(\theta)}^{S_{\partial M}^{-1}})$ 到左、右脑(类脑)内核协同与携带信息约化波动拟合变换(公式(66)),每一片约化 S^{-1} 上存储大量信息(如 MR 图像信息),而提取信息需要密钥群的生成序列,即分配表群(引导),可能存在余切的时间线上 $\rho_\theta(t')$ 。

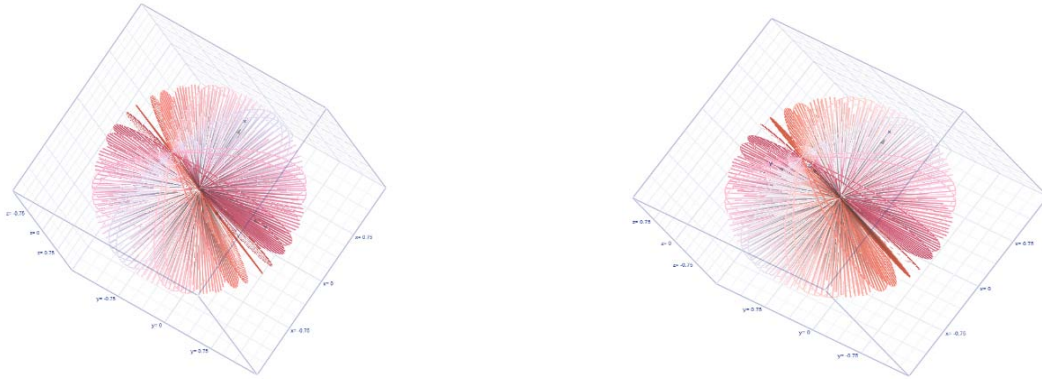


Fig59.携带密钥群生成序列 $(+ \Omega_{t'(\theta)}^{S_{\partial M}^{-1}} \wedge - \Omega_{t'(\theta)}^{S_{\partial M}^{-1}})$ 到左、右脑(类脑)内核协同与携带信息约化波动拟合变换,每一片约化 S^{-1} 上存储大量信息(如 MR 图像信息),而提取信息需要密钥群的生成序列,即分配表群(引导),可能存在余切的时间线上 $\rho_\theta(t')$ 。

$$S_{Left, right}^{m+k-1} \left(\sum_{k \geq 3}^m ctg^s \left(\sum_{\rho=2}^m \rho_{\theta} \cdot \frac{\theta_{\rho(t')}}{2} \right)_{E_X(t')}^{Q_{MR}} \right), \text{ if } s \geq 3,$$

即在更高维度上类脑开始左、右脑 功能开始分离,且神经元兴奋区域与兴奋度都有所不同; if $s = 1$ 时, 其 $S_{Left, right}^{m+k-1} \left(\sum_{k \geq 3}^m S_{Left, right}^{-k+1} \left(Q_{MR}^{核心能量} \right)_{\delta}^H \right)$ 类脑形态如 Fig57., 类脑处于休眠状态, 只有低频协振动的约化共振波。

$$S_{Left, right}^{m+k-1} \left(\sum_{k \geq 3}^m ctg^s \left(\sum_{\rho=2}^m \rho_{\theta} \cdot \frac{\theta_{\rho(t')}}{2} \right)_{E_X(t')}^{Q_{MR}} \right), \text{ and } s \geq 3 \text{ 表示维度, } \rho(t') \text{ 为极坐标的极径, } t' \text{ 为时间切线}$$

$$\omega_i^s(TR \otimes TE) \rightsquigarrow \omega_i^s(TR/TE), \omega_i^s(TR/TE)$$

$$\rightsquigarrow \sin^s \left(\sum_{i=2}^m \rho_{\theta}^i \cdot \frac{\theta_{\rho(t')}}{2}, \sum_{i=2}^m \rho_{\beta}^j \cdot \frac{\beta_{\rho(t')}}{2} \right)_{E_X(t')}^{Q_{MR}} \\ \times \cos^s \left(\sum_{i=2}^m \rho_{\theta}^i \cdot \frac{\theta_{\rho(t')}}{2}, \sum_{i=2}^m \rho_{\beta}^j \cdot \frac{\beta_{\rho(t')}}{2} \right)_{E_X(t')}^{Q_{MR}}, \text{ and } \omega_i^s(TR) \text{ 重复时间, } \omega_i^s(TE) \text{ 回波时间}$$

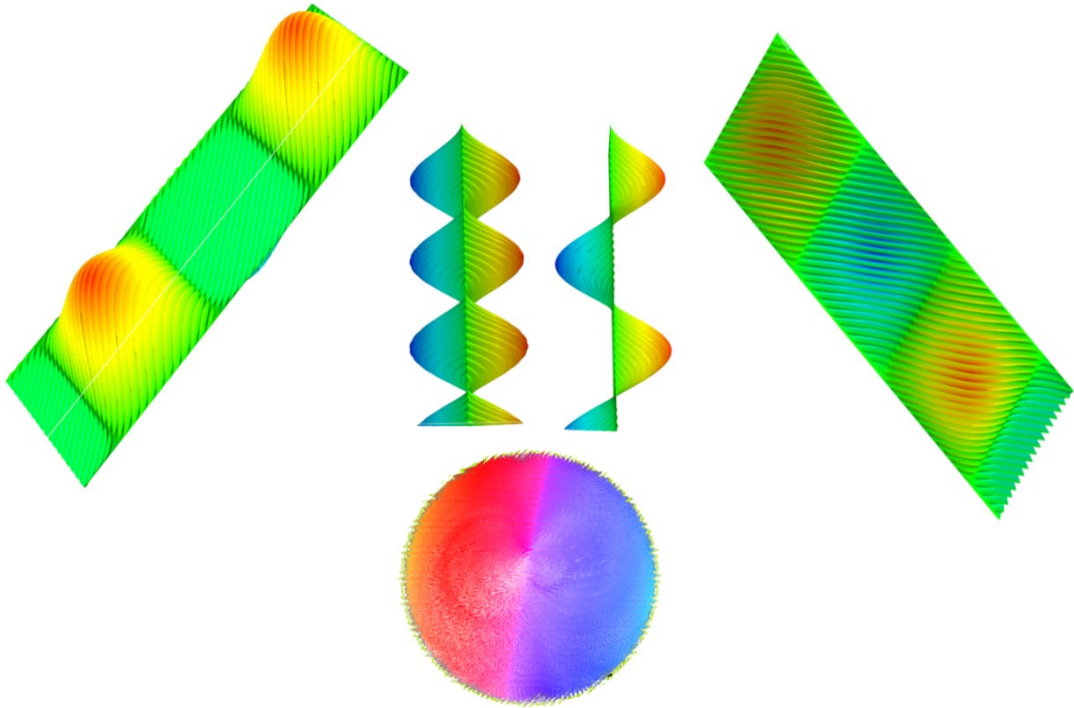


Fig60. 携带密钥群生成序列 $({}^+\Omega_{t'(\theta)}^{S_{\theta M}^{-1}} \wedge {}^-\Omega_{t'(\theta)}^{S_{\theta M}^{-1}})$ 到左、右脑(类脑)内核协同与携带信息约化波动拟合变换, 每一片约化 S^{-1} 上存储大量信息(如 MR 图像信息), 而提取信息需要密钥群的生成序列, 即分配表群(引导), 可能存在余切的时间线上 $\rho_{\theta}(t')$

i. 在高维信息场中, 存在一条隐蔽的时间线 $\rho_{\theta}(t')$, 即余切丛, 它穿越了高维与较低维类脑超切面与 S_k^{-1} 切片丛, 从而可以发现类脑与人脑可能都存在密钥群的生成序列, 及 $\rho_{\theta}(t')$ 余切丛、 S_k^{-1} 切片丛。

$$S_{Left, right}^{m+k-1} \left[\sum_{k \geq 3} ctg^s \left(\sum_{\rho=2}^m \rho_{\theta} \left(Matrix \begin{bmatrix} E_{X_E}^K \otimes X_K^H & & \\ & E_{X_S}^K \otimes X_K^H & \\ & & E_{X_M}^K \otimes X_K^H \end{bmatrix} \right)^Q \right) \cdot \frac{\theta_{\rho(t')}}{2} \right)^{Q_{MR}} \Bigg]_{E_X(t')} \sim S_{Left, right}^{m+k-1} \left(\sum_{k \geq 3} S_{Left, right}^{-k+1} \left(Q_{MR}^{核心能量} \right)_{\delta}^H \right), \text{ and } s \text{ 表示维度} \quad (66)$$

ii. 而 $Q_{MR}^{核心能量}$ 是维持类脑(人脑)记忆(信息存储介质)的核心能量[即记忆悬浮维持能量], 所以

$S_k^{-1}(Q_{MR}^{核心能量})$ 切丛片(携带能量), $\rho_{\theta}(t'(Q_{MR}^{核心能量}))$ 余切丛(携带能量)。

iii. $S_k^{-1}(Q_{MR}^{核心能量})$ 切片丛上携带大量可识别的信息数据, 它适用于类脑(人脑), 并通过余切丛 $\rho_{\theta}(t')$ 的密钥群生成序列来提取有用信息数据, 即

$$S_k^{-1}(\rho_{\theta}(t')) \xrightarrow{\text{提取数据}} [{}^+\Omega_t^{S_{\theta M}^{-1}} \wedge {}^-\Omega_t^{S_{\theta M}^{-1}}] \quad (67)$$

, 而 ${}^+\Omega_t^{S_{\theta M}^{-1}}(S_k^{-1}(\rho_{\theta}(t'))) \wedge {}^-\Omega_t^{S_{\theta M}^{-1}}(S_k^{-1}(\rho_{\theta}(t')))$ 为由密钥群生成序列的提取信息数据函数。

1.4、重构类脑神经网络 R-KFDNN

R-KFDNN 神经元结构函数: ${}^+\Omega_t^{S_{\theta M}^{-1}}(S_k^{-1}(\rho_{\theta}(t'))) \wedge {}^-\Omega_t^{S_{\theta M}^{-1}}(S_k^{-1}(\rho_{\theta}(t')))$

R-KFDNN 神经元链接的神经网络: $\sum_{k \geq 3}^m ctg^s \left(\sum_{\rho=2}^m \rho_{\theta} \cdot \frac{\theta_{\rho(t')}}{2} \right)_{E_X(t')}^{Q_{MR}}$

. 所以重构类脑神经网络的函数结构体:

$${}^+\Omega_t^{S_{\theta M}^{-1}} \left(S_k^{-1} \left(\sum_{k \geq 3}^m ctg^s \left(\sum_{\rho=2}^m \rho_{\theta} \cdot \frac{\theta_{\rho(t')}}{2} \right)^{Q_E} \right) \right) \wedge {}^-\Omega_t^{S_{\theta M}^{-1}} \left(S_k^{-1} \left(\sum_{k \geq 3}^m ctg^s \left(\sum_{\rho=2}^m \rho_{\theta} \cdot \frac{\theta_{\rho(t')}}{2} \right)^{Q_E} \right) \right) \quad (68)$$

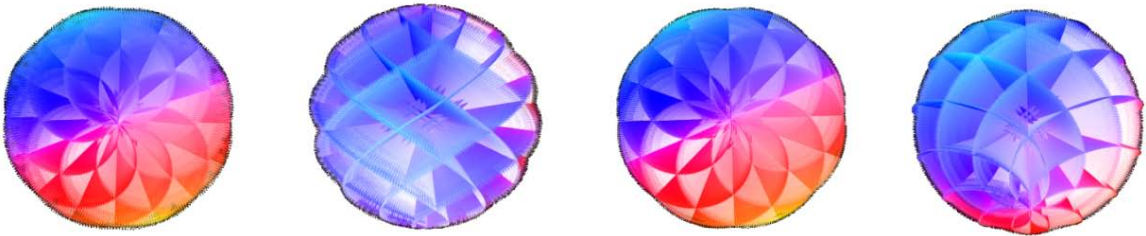


Fig61. 携带密钥群生成序列 $({}^+\Omega_t^{S_{\theta M}^{-1}} \wedge {}^-\Omega_t^{S_{\theta M}^{-1}})$ 到左、右脑(类脑)内核协同与携带信息约化波动拟合变换, 每一片约化 S^{-1} 上存储大量信息(如 MR 图像信息), 而提取信息需要密钥群的生成序列, 即分配表群(引导), 可能存在余切的时间线上 $\rho_{\theta}(t')$, [调整参数及函数组合]

上式为左、右类脑(人脑)局部重构类脑神经网络的函数体。下式为重构类脑(人脑)整体神经网络的

函数体的复杂高维度方程 R-KFDNN

$$S_{Left, right}^{m+k-1} \left[{}^{\wedge -} \Omega_{t'(\theta)}^{S_{\theta M}^{-1}} \left(S_k^{-1} \left(\sum_{k \geq 3}^m ctg^s \left(\sum_{\rho=2}^m \rho_{\theta} \cdot \frac{\theta_{\rho(t')}}{2} \right)^{Q_E} \right) \right) \right] = \Omega^{k+1} [\theta(\rho(t))]_{S_{Left, right}^{m+k-1}}, \text{ and } Q_E$$

$$= Matrix \begin{bmatrix} E_{X_E}^K \otimes X_K^H & & \\ & E_{X_S}^K \otimes X_K^H & \\ & & E_{X_M}^K \otimes X_K^H \end{bmatrix}^Q \text{ 为核心能量} \quad (68)$$

. 建立特殊柔性神经网络与重构类脑神经网络之间紧致性关联, 来解决 AI 中复杂性问题 KFDNN 深度神经网络的隐含层, 相当于类脑 R-KFDNN 的密钥群生成序列的切片丛 S_k^{-1} , 即

${}^{\wedge} \Omega_{t'(\theta)}^{S_{\theta M}^{-1}} (S_k^{-1}(\rho_{\theta}(t'))) \wedge {}^{\wedge} \Omega_{t'(\theta)}^{S_{\theta M}^{-1}} (S_k^{-1}(\rho_{\theta}(t')))$ 为相当于 KFDNN 的隐含层

. $t_{\omega}^{\aleph_0} < a_{\omega}^{\aleph_1}$, 假设存在一个集合 X , 并存在 $\exists X, x \in \bar{X}$, $\nexists \aleph_0 < x < \aleph_1$ 不存在集合势的连续性[一一对应] $\aleph_1$ 旋转缠绕 $\aleph_0$ 主轴, 其势的对应坐标 $[a_{(t_{kk}^x, t_{kk}^y, t_{kk}^z)}^{(kk)}]^{\uparrow \downarrow}$, 它的公式三维图像如下

$$[a_{t_{kk}^x}^v]^2 + [a_{t_{kk}^y}^v]^2 + [\Omega_{t_{kk}^z}^v]^2 < C(t_{kk}^x, t_{kk}^y, t_{kk}^z), \text{ and } t_{kk}^x, t_{kk}^y \in [A], t_{kk}^z \in (A) \quad (69)$$

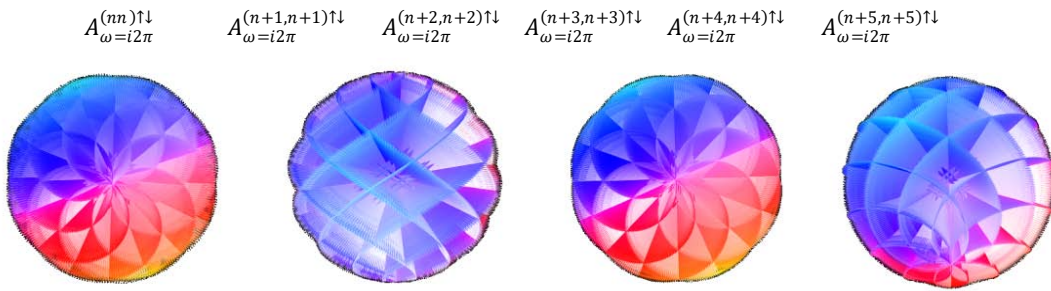


Fig62. $\aleph_1$ 旋转缠绕 $\aleph_0$ 主轴的交叉域进行非线性生成序列周期及 $A_{\omega=i2\pi}^{(nn)\uparrow\downarrow}$ 的三维图像

. 隐蔽时间线和高维生成序列的势形成卷积势的空间结构, 以及密钥群势生成序列的超对称结构

密钥群势生成序列的超对称结构 $({}^0 M_{\theta}^{s-2}, {}^{\pi} M_{\theta}^{s-2})$; 所以, $-M_{\theta}^{s-2}(C_{ij}^*)^{t(\theta)^{s-3}} \sim -M_{\theta}^{s-2}(C_{ij}^*)^{\theta_i^{s-3}}$, 则

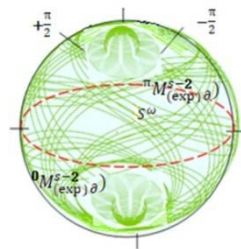
$${}^1 S_{M_{\theta}}^{\omega(\theta)} \sim \Sigma[-M_{\theta}^{s-2}(\theta_{t(0)}^{s-3})], \quad {}^2 S_{M_{\theta}}^{\omega(\theta)} \sim \Sigma[-M_{\theta}^{s-2}(\theta_{t(\pi)}^{s-3})] \text{ 所以 } ({}^1 S_{M_{\theta}}^{\omega(\theta)}, {}^2 S_{M_{\theta}}^{\omega(\theta)}) = \Sigma_{\omega=s}^{2n} (-M_{\theta}^{s-2}(\theta_{t(0)}^{s-2}), -M_{\theta}^{s-2}(\theta_{t(\pi)}^{s-2})),$$

由于单纯型密钥群势生成序列具有正态概率分布, 所以 $({}^0 M_{\theta}^{s-2}, {}^{\pi} M_{\theta}^{s-2})$ 在曲面上具有 $\exp(i\theta)$ 空间形态的超曲面。

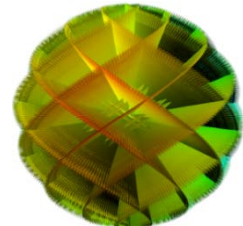
更高维超曲面(形态高维核)



$({}^0 M_{(\exp)\theta}^{s-2}, {}^{\pi} M_{(\exp)\theta}^{s-2})$



更高维超曲面(形态高维核)



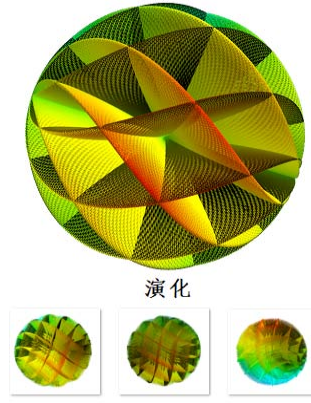


Fig63. 高维核单纯型超切丛、余切丛的稀疏矩阵密钥群势生成序列的正态概率分布

.KFDNN 的拟思维迭代规划比 R-KFDNN 在 AI 数模上较为简单实用。而 KFDNN 使用深度统计的 3 套核心公式：

$$P_{(A_i, A_j)}^{(1)} = \left(\frac{1}{4}\right)^n \times \left[\sin\left(A_1 + \sum_{i=2}^m A_i + n \cdot \frac{\pi}{4}\right) + \sin\left(A_1 - \sum_{i=2}^m A_i + n \cdot \frac{\pi}{4}\right) \right]_{P_{i(x,y)}^*} \quad (70)$$

$$P_{(A,B)}^{(2)} = \left(\frac{1}{4}\right)^{n-1} \times \sqrt{2} \left[\sin\left(\frac{A_1}{2} + \frac{\pi}{4} + n \cdot \frac{\pi}{4}\right) \cos\left(\sum_{i=2}^m A_i + \sum_{i=2}^m i \cdot \frac{A_i}{2}\right) - \sin\left(\frac{B_1}{2} + \frac{\pi}{4} + n \cdot \frac{\pi}{4}\right) \cos\left(\sum_{i=2}^m B_i + \sum_{i=2}^m i \cdot \frac{B_i}{2}\right) \right]_{P_{ij(x_i, y_j)}^*} \quad (71)$$

$$[\text{Tanh} \times \text{Ctanh}]^v = \frac{\left[\frac{k^2 \sigma_1}{3 \sqrt{\frac{\pi^2}{4}}} \times e^{\frac{1}{ij} \theta \frac{+2}{\sqrt{\pi}} (X_{ij} X_{i+1, j+1})} - \frac{k^2 \sigma_2}{3 \sqrt{\frac{\pi^2}{4}}} \times e^{\frac{1}{ij} \theta \frac{+2}{\sqrt{\pi}} (X_{i+1, j+1} X_{ij})} \right]}{\left[\frac{k^2 \sigma_3}{3 \sqrt{\frac{\pi^2}{4}}} \times e^{\frac{1}{ij} \theta \frac{+2}{\sqrt{\pi}} (X_{ij} X_{i+1, j+1})} + \frac{k^2 \sigma_4}{3 \sqrt{\frac{\pi^2}{4}}} \times e^{\frac{1}{ij} \theta \frac{+2}{\sqrt{\pi}} (X_{i+1, j+1} X_{ij})} \right]} \otimes \frac{\left[\frac{k^2 \sigma_5}{3 \sqrt{\frac{\pi^2}{4}}} \times e^{\frac{1}{ij} \theta \frac{-2}{\sqrt{\pi}} (X_{ij} X_{i+1, j+1})} + \frac{k^2 \sigma_6}{3 \sqrt{\frac{\pi^2}{4}}} \times e^{\frac{1}{ij} \theta \frac{-2}{\sqrt{\pi}} (X_{ij} X_{i+1, j+1})} \right]}{\left[\frac{k^2 \sigma_7}{3 \sqrt{\frac{\pi^2}{4}}} \times e^{\frac{1}{ij} \theta \frac{-2}{\sqrt{\pi}} (X_{ij} X_{i+1, j+1})} - \frac{k^2 \sigma_8}{3 \sqrt{\frac{\pi^2}{4}}} \times e^{\frac{1}{ij} \theta \frac{-2}{\sqrt{\pi}} (X_{ij} X_{i+1, j+1})} \right]}$$

$$, \text{and } \sigma\left(\pi, \frac{\pi}{4}, \frac{\pi}{2}, 2\pi\right)^{-T^2} \rightarrow \sigma\left(\pi, \frac{\pi}{4}, \frac{\pi}{2}, 2\pi\right)^{T^2}, \quad (72)$$

vi. KFDNN 再通过 KNN 神经网络训练、学习，大大提高了 AI 数模的风控精度。

而重构类脑神经网络 R-KFDNN 远比上述的 KFDNN 难得多，其数模本身具有高维度空间的非线性扰动，对信息场数据处理在不同层面、不同维度、不同切丛、余切丛上运行。对数据提取需要密钥群，在数据导引上存在一条隐蔽的时间切线，类似数据分配表，但比它更加复杂。

$$\cdot \text{密钥群} : {}^{+}\Omega_{t'(\theta)}^{S_{\theta M}^{-1}} \left(S_k^{-1} \left(\rho_{\theta}(t') \right) \right) \wedge {}^{-}\Omega_{t'(\theta)}^{S_{\theta M}^{-1}} \left(S_k^{-1} \left(\rho_{\theta}(t') \right) \right)$$

类脑高维形态: $\Omega^{k+1}[\theta(\rho(t))]$ $_{Left, right}^{m+k-1}$, 不同维度

不同层面形态： $S_{Left, right}^{m+k-1} \left(\sum_{k \geq 3}^m ctg^s \left(\sum_{\rho=2}^m \rho_{\theta} \cdot \frac{\theta_{\rho(t')}}{2} \right)_{E_X(t')}^{Q_{MR}} \right)$

不同切丛形态(切片丛)： $S_k^{-1}(\rho_{\theta}(t'))^{Q_E}$

余切丛形态： $\rho_{\theta} \left(t' \left(Q_{MR}^{核心能量} \right) \right)$

数据导引隐蔽的时间切线： $\rho_{\theta}(t'(Q_E)) \rightarrow \sum_{k \geq 3}^m ctg^s \left(\sum_{\rho=2}^m \rho_{\theta} \cdot \frac{\theta_{\rho(t')}}{2} \right)_{E_X(t')}^{Q_{MR}}$, 类似数据分配表, 但更加复杂。

. 密钥群分布在切片丛上, 即 ${}^{+}\Omega_{t'(\theta)}^{S_{\rho M}^{-1}}(S_k^{-1}) \wedge {}^{-}\Omega_{t'(\theta)}^{S_{\rho M}^{-1}}(S_k^{-1})$, and S_k^{-1} 表示切片丛。而且

$${}^{+}\Omega_{t'(\theta)}^{S_{\rho M}^{-1}}(S_k^{-1}(\rho_{\theta}(t'))) \rightarrow \rho_{\theta}(t') \subset \sum_{k \geq 3}^m ctg^s \left(\sum_{\rho=2}^m \rho_{\theta} \cdot \frac{\theta_{\rho(t')}}{2} \right)_{E_X(t')}^{Q_E}$$

即密钥群最终应该分布在 $\sum_{k \geq 3}^m ctg^s \left(\sum_{\rho=2}^m \rho_{\theta} \cdot \frac{\theta_{\rho(t')}}{2} \right)_{E_X(t')}^{Q_E}$ 的 $\rho_{\theta}(t')$ 时间切线弧上。

. 有时在类脑(人脑)中密钥群可能称为记忆碎片分配表。

脑的记忆解析与 AI 数模分析

$\omega^s(\lambda^i) \rightarrow {}^{+}\Omega_{t'(\theta)}^{S_{\rho M}^{-1}}(S_k^{-1}(\rho_{\theta}(t')))$, and λ^i 为类脑波频率, ω 为角速度, s 表示维度

$$\left[{}^{+}\Omega_{t'(\theta)}^{S_{\rho M}^{-1}} \right]_{\rho_{\theta}}^T \sim \Omega^{s+1} \left(\frac{\omega^s(\lambda^i)}{S_k^{-1}(\rho_{\theta}(t'))} \right)$$

. 记忆解析入门——反射镜像(伴随局部随机数据缺失)

$$\left[\begin{array}{cc} \omega^s(\lambda^i) & S_k^{-1}(\rho_{\theta}(t')) \\ \rho_{\theta}(t') & Q_E \end{array} \right]_{\rho_{\theta}}^{s\Omega^T(\omega, S_k^{-1})} \sim \left[{}^{+}\Omega_{t'(\theta)}^{S_{\rho M}^{-1}} \right]^T$$

$$\left[\begin{array}{cccc} \omega_1 & \omega_2 & \dots & \Omega_{Q_E}^{s+1}(\lambda^i)_{\omega} \\ S_1^{-1} & S_2^{-1} & \dots & \vdots \\ \vdots & \vdots & \ddots & \vdots \\ \rho_{\theta_1} & \rho_{\theta_2} & \dots & \vdots \end{array} \right] \xrightarrow[\text{局部随机数据缺失}]{\text{反射镜像}} \left[\begin{array}{cccc} \dots & \dots & \dots & \rho_{\theta_2}^* \\ \dots & \dots & \dots & \rho_{\theta_1}^* \\ \vdots & \vdots & \vdots & \vdots \\ \Omega_{Q_E}^{s+1}(\lambda^i)_{\omega} & \dots & S_2^{-1} & \omega_2^* \\ \dots & \dots & \omega_1^* & S_1^{-1} \end{array} \right] \quad (73)$$

. 当 ${}^{+}\Omega_{Q_E}^{s+1}(\lambda^i)_{\omega} \vee {}^{-}\Omega_{Q_E}^{s+1}(\lambda^i)_{\omega} \cong I^{s+1}(\lambda^i)_{\omega}$, and s 表示维度, ω 为振幅, λ^i or λ^i_* 表示频率; 所以记忆解析关键变

量为 $I^{s+1}(\lambda^i)_{\omega}$, 通过高维度信息场镜像反射来获得类脑(人脑)信息数据

$$\left[{}^{\wedge}\Omega_t^{S_{\theta M}^{-1}} \right]_{\rho_{\theta}}^T \rightarrow \left[{}^+\Omega_{Q_E}^{s+1}(\lambda^i)_{\omega} \vee {}^-\Omega_{Q_E}^{s+1}(\lambda^i)_{\omega} \right]$$

解析入门埋在信息中，而且在更高维度上运行；记忆解析需要高速 $\omega^s(\lambda^i)$ ，且为线性的。

$$\text{记忆解析: } I_{pass}^{s+1}(\lambda^i)_{\omega} : \left[{}^+\Omega_{Q_E}^{s+1}(\lambda^i)_{\omega} \vee {}^-\Omega_{Q_E}^{s+1}(\lambda^i)_{\omega} \right]_{\rho_{\theta}(t')}^{S_k^{-1}}$$

$$I_{pass}^{s+1}(\lambda^i)_{\omega} : \left[{}^+\Omega_{Q_E}^{s+1}(\lambda^i)_{\omega} \vee {}^-\Omega_{Q_E}^{s+1}(\lambda^i)_{\omega} \right]_{\rho_{\theta}(t')}^{S_k^{-1}}$$

...

$$I_{pass}^3(\lambda^i)_{\omega} : \left[{}^+\Omega_{Q_E}^3(\lambda^i)_{\omega} \vee {}^-\Omega_{Q_E}^3(\lambda^i)_{\omega} \right]_{\rho_{\theta}(t')}^{S_k^{-1}}$$

$$I_{pass}^2(\lambda^i)_{\omega} : \left[{}^+\Omega_{Q_E}^2(\lambda^i)_{\omega} \vee {}^-\Omega_{Q_E}^2(\lambda^i)_{\omega} \right]_{\rho_{\theta}(t')}^{S_k^{-1}}$$

(74)

$\rho_{\theta}(t')$ 的紧致性压缩,即同时存在时间 t' 的压缩结构,而 $I_{pass}^{s+1}(\lambda^i)_{\omega}$ 将自由切换于高维信息场中。所以,

记忆解析入门的钥匙就在 $I_{pass}^{s+1}(\lambda^i)_{\omega(t')}$ 中,就是一种特殊频率的线性波结构形态。

$${}_{left}^+\Omega(S_{\lambda(t,\theta)}^{-1}) \wedge {}_{right}^-\Omega(S_{\lambda(t,\theta)}^{-1})$$

$$\rightsquigarrow \left[\sin \left(\sum_{i=2}^m \rho_{\theta}^i \cdot \frac{\theta_{\rho(t')}^i}{2} \wedge \sum_{j=2}^m \rho_{\beta}^j \cdot \frac{\beta_{\rho(t')}^j}{2} \right) \otimes \cos \left(\sum_{j=2}^p \rho_{\theta}^j \cdot \frac{\theta_{\rho_*}^j(t')}{2} \wedge \sum_{i=2}^q \rho_{\beta}^i \cdot \frac{\beta_{\rho_*}^i(t')}{2} \right) \right]^{\omega(t)^{i-\omega(\theta)}}$$

此式为类脑(脑)左、右脑分离,且每片约化的记忆悬浮

$$\left\{ \begin{array}{l} {}_{left}^+\Omega(S_{\lambda(t,\theta)}^{-1}) \rightsquigarrow \left[\sin \left(\sum_{i=2}^m \rho_{\theta}^i \cdot \frac{\theta_{\rho(t')}^i}{2} \wedge \sum_{j=2}^m \rho_{\beta}^j \cdot \frac{\beta_{\rho(t')}^j}{2} \right) \right]^{\omega(t)^{i-\omega(\theta)}} \\ {}_{right}^-\Omega(S_{\lambda(t,\theta)}^{-1}) \rightsquigarrow \left[\cos \left(\sum_{j=2}^p \rho_{\theta}^j \cdot \frac{\theta_{\rho_*}^j(t')}{2} \wedge \sum_{i=2}^q \rho_{\beta}^i \cdot \frac{\beta_{\rho_*}^i(t')}{2} \right) \right]^{\omega(t)^{i-\omega(\theta)}} \end{array} \right.$$

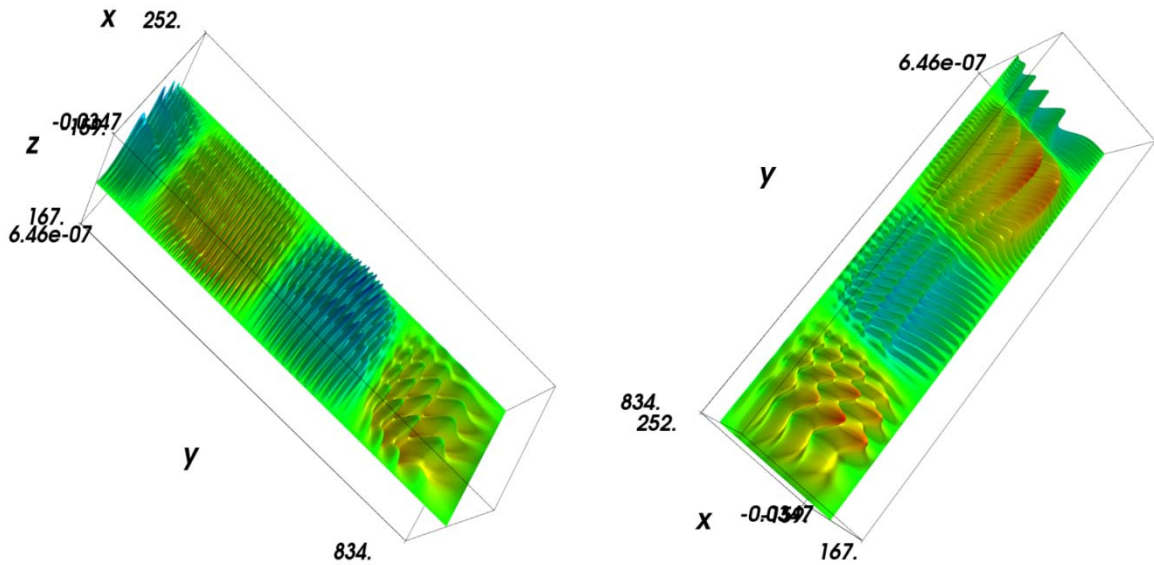


Fig64. RLLM 增强思维能力搜索增强微调 and 收缩参数群尺度_密钥群的生成序列的更高维度幂函数为高维度复变弦线丛势生成序列

4.1. 《RLLM 多模态可预测性思维增强收缩参数群、尺度新一代生成式人工智能重构类脑神经网络 R-KFDNN 与密钥群生成序列》简单数模程设

4.1.1 重构类脑(脑)神经网络，不是所有脑区神经元都能受损记忆重构的，即只有特殊携带高维神经(元)网络，受损局部神经元恢复记忆重构，并形成新的对偶密钥群核势(凸核)生成序列。

受损局部神经元恢复记忆重构形成新的对偶密钥群核势(凸核)生成序列的程序设计模型

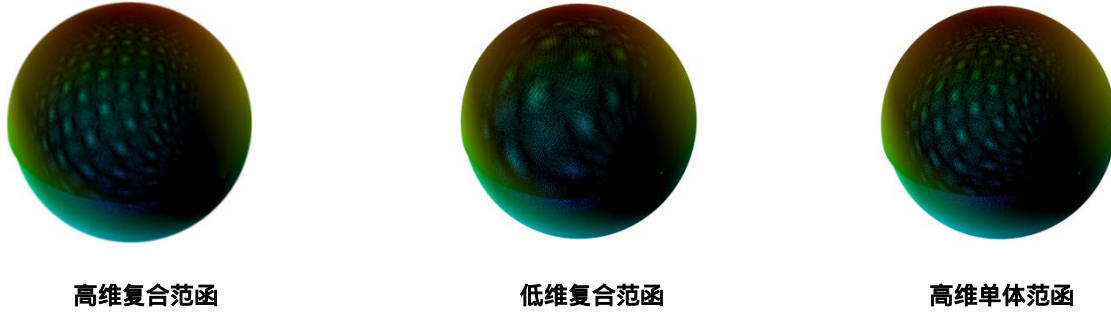


Fig65. 类脑[脑]对偶密钥群核势[凸核]生成序列，高维复合范函方程与程序设计局部代码模型

举例：高维复合范函的程序设计局部代码模型[类脑[脑]对偶密钥群核势[凸核]生成序列]

#Create the data.

import numpy

from numpy import pi, sin, cos, mgrid

import numpy as np

import math

from mayavi import mlab

pi = np.pi, s = 2, N = 2, M = 2, t = 11, w = 22, k = 1; dphi, dtheta = pi / 250.0, pi / 250.0

*[phi, theta] = mgrid[0:pi + dphi * 16/6:dphi, 0:20/6 * pi + dtheta * 1.5:dtheta]*

m₀ = s - 1; m₁ = s - 1; m₂ = s - 1; m₃ = s - 1; m₄ = s - 1; m₅ = s - 1; m₆ = s - 1; m₇₀ = s - 1;

*r = numpy.power((numpy.power($\left(np.\sin\left(\frac{1}{t} * \text{numpy.power}(\text{phi}, k)\right), N\right) + \text{numpy.power}(np.\cos(1/t$*
** numpy.power(theta, k)), N)), M)*

$\begin{cases} x = r * \sin(\text{phi}) * \cos(\text{theta}) \\ y = r * \cos(\text{phi}) \\ z = r * \sin(\text{phi}) * \sin(\text{theta}) \end{cases}$

#View it.

pl = mlab.surf(x, y, z, warp_scale = "auto")

mlab.surf(x, y, z, warp_scale = "auto")

mlab.outline(pl)

mlab.show()

#Or view it.

s = mlab.mesh(x, y, z, representation = "wireframe", line_width = 1.0)

mlab.show()

② 受损局部神经元恢复记忆重构形成新的对偶密钥群生成序列能量分布情况的程序设计模型

.高维复合范函的程序设计局部代码模型[类脑[脑]对偶密钥群生成序列能量分布图像

```

import numpy
from numpy import pi, sin, cos, mgrid
import numpy as np
import math
from mayavi import mlab

pi = np.pi, s=2, N=2, M=1, dphi, dtheta = pi / 250.0, pi / 250.0
[phi, theta] = mgrid[0:pi + dphi * 16/6:dphi, 0:20/6 * pi + dtheta * 1.5:dtheta]
m0 = s-1; m1 = s-1; m2 = s-1; m3 = s-1; m4 = s-1; m5 = s-1; m6 = s-1; m7 = s-1;
r = numpy.power((numpy.power(np.sin(m0*phi*m1*(phi/2)+2*m0*phi*m1*(phi/2)),N) +
numpy.power(np.cos(m0*theta*m1*(theta/2)+2*m0*theta*m1*(theta/2)),N)),M)
x = r*sin(phi)*cos(theta)
y = r*cos(phi)
z = r*sin(phi)*sin(theta)
# View it.
pl = mlab.surf(x, y, z, warp_scale="auto")
mlab.axes(xlabel='x', ylabel='y', zlabel='z')
mlab.outline(pl)
mlab.show()

```

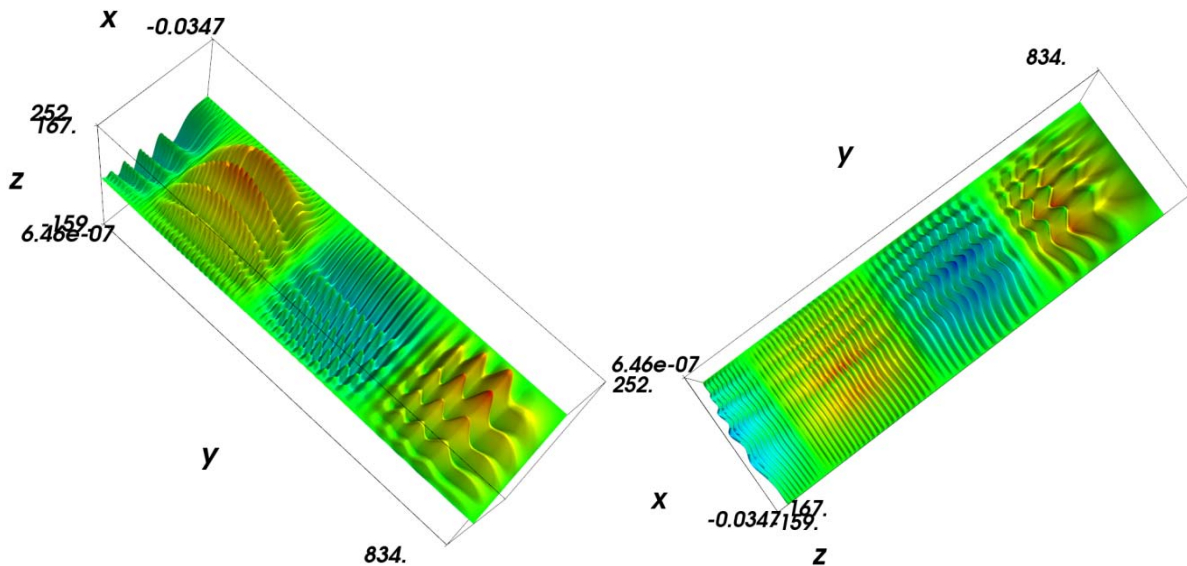


Fig66. 类脑[脑]对偶密钥群生成序列，高维复合范函数与程序设计局部代码模型

. 举例 :高维复合范函数程序设计局部代码模型[类脑[脑] 对偶密钥群核势[凸核]生成序列分布图像

```

import numpy
from numpy import pi, sin, cos, mgrid
import numpy as np
import math
from mayavi import mlab

pi = np.pi, s = 2, N = 2, M = 1, t = 11, w = 22, k = 1; dphi, dtheta = pi / 250.0, pi / 250.0
[phi, theta] = mgrid[0:pi + dphi * 16/6:dphi, 0:20/6 * pi + dtheta * 1.5:dtheta]
m0 = s - 1; m1 = s - 1; m2 = s - 1; m3 = s - 1; m4 = s - 1; m5 = s - 1; m6 = s - 1; m70 = s - 1;

```

```

r = numpy.power((numpy.power(np.sin(m0 * phi * m1 * (phi/2) + 2 * m0 * phi * m1 * (phi/2)), N)
+ numpy.power(np.cos(m0 * theta * m1 * (theta/2) + 2 * m0 * theta * m1
* (theta/2)), N)), M)

{
x = r * sin(phi) * cos(theta)
y = r * cos(phi)
z = r * sin(phi) * sin(theta)
}

#View it.
s = mlab.mesh(x,y,z,representation="wireframe",line_width=1.0)
mlab.show()

```



Fig67. 类脑[脑]对偶密钥群核势[凸核]生成序列，高维复合范函方程与程序设计局部代码模型[参数 N=2]

·举例：低维复合范函程序设计局部代码模型[类脑[脑] 对偶密钥群核势[凸核]生成序列分布图像

```

import numpy
from numpy import pi, sin, cos, mgrid
import numpy as np
import math
from mayavi import mlab

pi = np.pi, s=3, N=1, M=1.5, t1=10, t2=20, k=s-2, dphi, dtheta = pi / 255.0, pi / 255.0
[phi, theta] = mgrid[0:pi + dphi * 16/6:dphi, 0:20/6 * pi + dtheta * 1.5:dtheta]
m0 = s-2; m1 = s-2; m2 = s-1; m3 = s-1; m4 = s-1; m5 = s-1; m6 = s-1; m7 = s-1;
r = numpy.power((numpy.power(np.sin(1/t1*m1*(numpy.power(phi,k)/2)),N) +
numpy.power(np.cos(1/t2*m1*(numpy.power(theta,k)/2)),N)),M)
x = r*sin(phi)*cos(theta)
y = r*cos(phi)
z = r*sin(phi)*sin(theta)
s = mlab.mesh(x, y, z, representation="wireframe", line_width=1.0)
mlab.show()

```



Fig68. 类脑[脑]对偶密钥群核势[凸核]生成序列，低维复合范函方程与程序设计局部代码模型[参数 N=1]

.举例 :高维单体范函程序设计局部代码模型[类脑[脑] 对偶密钥群核势[凸核]生成序列分布图像

```
import numpy
from numpy import pi, sin, cos, mgrid
import numpy as np
import math
from mayavi import mlab

pi = np.pi ,s=3, N=1 or N=2 ,M=1.5 ,t1=10 ,t2=20 ,k=s-2
dphi, dtheta = pi / 255.0, pi /255.0
[phi, theta] = mgrid[0:pi + dphi * 16/6:dphi, 0:20/6*pi + dtheta * 1.5:dtheta]
m0 = s-2; m1 = s-2; m2 = s-1; m3 = s-1; m4 = s-1; m5 =s-1; m6 = s-1; m7 = s-1;
r = numpy.power((numpy.power(np.cos(1/t2*m1*(numpy.power(theta,k)/2)),N)),M)
x = r*sin(phi)*cos(theta)
y = r*cos(phi)
z = r*sin(phi)*sin(theta)
s = mlab.mesh(x, y, z, representation="wireframe", line_width=1.0 )
mlab.show()
```

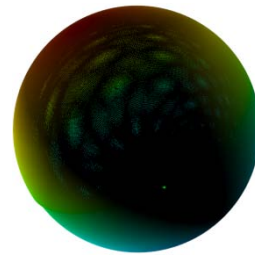
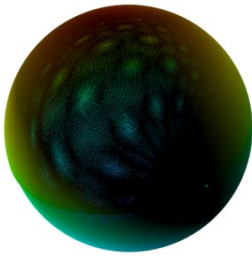


Fig69. 类脑[脑]对偶密钥群核势[凸核]生成序列，高维单体范函方程与程序设计局部代码模型[参数 N=1]

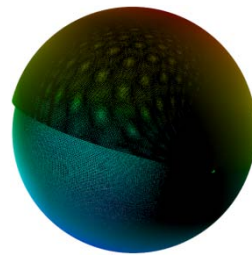
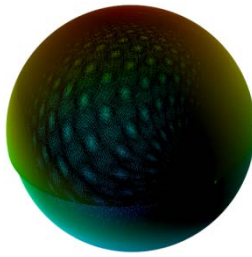


Fig70. 类脑[脑]对偶密钥群核势[凸核]生成序列，高维单体范函方程与程序设计局部代码模型[参数 N=2]

5.1 结论

重构类脑神经网络 R-KFDNN ,首次 从类脑重核边界密钥群生成序列超切面与柔性深度神经网络(KFDNN)、类脑神经网络进行融合。在局部神经受损的神经系统修复的角度分析类脑如何从携带指纹特征密钥群生成序列的时间切丛的分配表群中获得记忆解析 ,从而为记忆恢复提供有益帮助。

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