$L_{1/2}$ Space and great Conjectures

Yajun Liu*

(South China University of Technology, Guangzhou P.R. China 510640)

e-mail:yajun@scut.edu.cn

Abstract In this paper, we get a characteristic equation of $L_{1/2}$ space and we find that using this equation we can give proofs of the famous Conjectures.

Keywords $L_{1/2}$ Space Conjectures

$L_{1/2}$ Space coordinate system

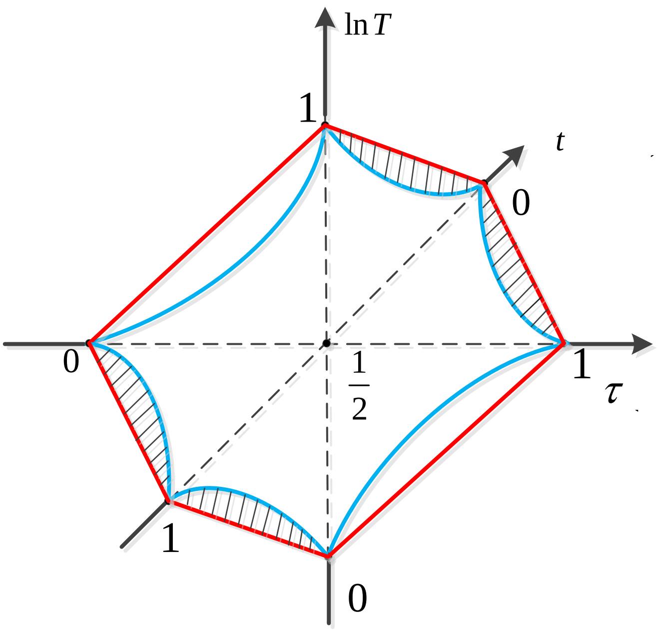

Figure.1. Unit a $L_{1/2}$ space

$$\tau \in N[0 \quad {}^{1}\!/_{2} \quad 1] \ N \bmod (2N)$$

$$T \in (e^{2\pi Ni} = 1, e = \lim_{n \to \infty}(1 + \frac{1}{N})^{N})$$

$$t \in \left\langle \frac{e^{i2\pi} + e^{i\pi}}{2} = 0, \frac{e^{i2\pi} - e^{i\pi}}{2} = 1 \right\rangle$$

$$< T >_{[0,1)} = < \tau >_{[0,1/2,1]} + < t >_{[0,1]}$$

$$LnT = N + \frac{\rho}{2\pi i}$$

The Proof of Riemann Hypothesis

Riemann Hypothesis means that $\sum_N \mathrm{Re}(s) = 1/2 \bullet N$

$$\begin{bmatrix} 010 \\ 0\,1/2\,1 \\ 100 \end{bmatrix} \rightarrow \ln T = N + \frac{\rho}{2\pi i} \rightarrow \begin{bmatrix} 1/2 & 1/2 + \frac{\rho}{2\pi i} & \bullet\bullet\bullet\bullet\bullet\bullet\, 1/2 + \frac{\rho}{2\pi Ni} \\ 1/2 - \frac{\rho}{2\pi i} & 1/2 & \bullet\bullet\bullet\bullet\bullet\bullet\bullet\bullet\bullet\bullet\bullet\bullet \\ \bullet\bullet\bullet\bullet\bullet\bullet\bullet\bullet\bullet\bullet\bullet\bullet\bullet\bullet & 1/2 & \bullet\bullet\bullet\bullet\bullet\bullet\bullet\bullet\bullet\bullet\bullet\bullet \\ 1/2 - \frac{\rho}{2\pi Ni} & \bullet\bullet\bullet\bullet\bullet\bullet\bullet\bullet\bullet\bullet\bullet\bullet\bullet\bullet\bullet & 1/2 \end{bmatrix} \quad (N \times N)$$

This is a Hermitian matrix, its Eigens value is all the non-trivial zeros of **Zeta Function.** The trace of matrix $t_r(A) = 1/2 \bullet N$. **SO this is a Proof of Riemann Hypothesis!**

$$1 + 1/N\left(\frac{\rho}{2\pi i} - LnT\right) = 0$$

We Can get the character of this Domain is N, and the character is also a prime number ~P,

$$N \sim P$$

$$N + 1 \sim P + 2$$

This is a proof of Twin Prime Conjecture !!!

$$N \sim P$$

$$2N = P_1 + P_2$$

This is a proof of Goldbach conjecture!!!

$$N \sim P$$

$$2N + 1 \sim 0$$

This is a concise proof of Fermat' last Theorem!!!.