

Riemann Hypothesis and Levison Theorem

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Abstract:

In this paper we will give a simple proof of Riemann Hypothesis, considered to be one of the greatest unsolved problem in mathematics, related to inverse scattering problem and radom matrice.

The important relationship between Riemann Hypothesis and random matrices was found by Freeman J. Dyson (1972). Dyson was write a paper [1] at 1975, related random matrices and inverse scattering problem. Under this explanation, the famous Riemann Hypothesis is equivalent to Levison theorem of scattering phase-shifts[2]. We will proven this relation.

References:

[1]Freeman J. Dyson, Fredholm determinants and inverse scattering problems, Communications in Mathematical Physics, Vol 47, No. 2 , 171-183pp ,1976.6;

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[3]Kang Feng, Collected Works of Feng Kang (in Chinese), Beijing: Defense Industry Press,1994;

[4]De-hao Yu, Natural Boundary Integral Methods and Its Applications, Beijing: Science Press,2006(Chinese Edition,1993).

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