Hexin Bi

History of Psychology

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Essay of Qi Yao

[18,21,1980, 1994,2,0,0]

Srinivasa Ramanujan is a famous mathematician in the 19th century. He was born in India in 1887 and finished self-taught mathematics. Ramanujan developed highly original and insightful theorems in number theory infinite series and continued fraction. By working with G.W. Hardy, He came up to Ramanujan prime and Ramanujan theta function. In 1987, the mathematician held a conference called Ramanujan Centennial Conference to memorize him. As a participant of this conference, Qi Yao is also a mathematician affected by Ramanujan's theory. She worked with her husband Shi Tuo Lou who is also a mathematician and came up with several works related to the number theory and Riemann hypothesis. In 1980, they successfully proved that $No(T) > 0.35N(T)$ shorten the whole interval. However, with years of study, it remains a mystery. In addition, like Doctor Lou, she has also been through a tough era--the great cultural revolution at the beginning of the 20th century in China. Most of the scientists and educator has been threatening to leave their position. During that time, the whole society put the most effort into industrial and agricultural development. Especially for women, they did not have enough opportunities to choose where to work. Their choice and demand have not been valued. With years of hard work with her husband, she works as a professor at Shan Dong University too and taught the first generation of young teenagers who are very talented in mathematics. Some of them have become famous mathematicians and professors now. With the years of support and

analysis together, she and her husband Doctor Luo complete an improvement in proving the Rieman Hypothesis. After that, she went to America with Doctor Luo and worked with him on number theory together. They won the prize of Hardy Ramanujan society together by the work of $p_{n+1}-p_n<C(e)p_n^a+C$.

She published 18 articles from 1980 to 1994 overall. Most of them are related to number theory like "Estimate of sums of Dirichlet series" and The number of primes in a short interval. They came up with the first version of the Chinese advanced mathematics textbook and also explored some new fields of Ramanujan's work. She is a brave and talented mathematician and math educator overall. She overcomes a lot of difficulties and successfully educates the new generation of Chinese mathematicians.