

The SASTRA Ramanujan Prize for 2022

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In news- The SASTRA Ramanujan Prize for 2022 has been awarded to Yunqing Tang, Assistant Professor with the University of California, Berkeley, U.S.A.

Yunqing Tang's work-

- Ms. Yunqing's works **display a remarkable combination of sophisticated techniques, in which the arithmetic and geometry of modular curves and of Shimura varieties play a central role**, and her results and methods are bound to have major impact on future research in this area.
- Tang's most recent joint work with Frank Calegari and Vesselin Dimitrov on modular equations is of great significance and also has ties with Ramanujan's own work.

What is SASTRA Ramanujan Prize?

- The award, instituted by the Shanmugha Arts, Science, Technology & Research Academy (SASTRA) (located near Kumbakonam) in 2005 with a cash prize of \$10,000.
- It is **presented annually to individuals aged 32 and below**, who made outstanding **contributions in the field of mathematics, influenced by Srinivasa Ramanujan** in a broad sense.
- The prize for 2022 will be awarded at the International Conference on Number Theory during December at SASTRA University.

About Ramanujan-

- He was born on 22nd December 1887 in Erode, India.
- Ramanujan, Indian mathematician whose contributions to

the theory of numbers include pioneering discoveries of the properties of the partition function.

- He also discovered the properties of the partition function
- Though he had almost no formal training in pure mathematics, he made substantial contributions to mathematical analysis, number theory, infinite series, and continued fractions, including solutions to mathematical problems then considered unsolvable.
- In 1911 Ramanujan published the first of his papers in the Journal of the Indian Mathematical Society.
- His genius slowly gained recognition, and in 1913 he began a correspondence with the British mathematician Godfrey H. Hardy led to a special scholarship from the University of Madras and a grant from Trinity College, Cambridge.
- His original and highly unconventional results, such as the Ramanujan prime, the Ramanujan theta function, partition formulae and mock theta functions, have opened entire new areas of work and inspired a vast amount of further research
- In 1918 Ramanujan became one of the youngest Fellows of the Royal Society of London and only the second Indian member, and the first Indian to be elected a Fellow of Trinity College, Cambridge.
- During his short life, Ramanujan independently compiled nearly 3,900 results (mostly identities and equations).
- In 1919, due to hepatic amoebiasis (a complication from episodes of dysentery many years previously) compelled Ramanujan's return to India, where he died in 1920 at the age of 32
- His "lost notebook", containing discoveries from the last year of his life, caused great excitement among mathematicians when it was rediscovered in 1976.