N-level density of low-lying zeros of some families of L-functions

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Time: 10.00am – 11.00am
Venue: MAS Executive Classroom 2, MAS-03-07
School of Physical and Mathematical Sciences

The density conjecture of Katz and Sarnak suggests that the distribution of zeros near 1/2 of a family of L-functions is the same as that of eigenvalues near 1 of a corresponding classical compact group. This has been confirmed for various families. In this talk, I will discuss my work on the n-level density of low-lying zeros of some families of L-functions.

Speaker Biography

Peng Gao received his PhD from the University of Michigan in 2005 under the direction of Prof. Hugh Montgomery and Prof. Kannan Soundararajan. He spent the academic year 2005-2006 visiting the American Institute of Mathematics (AIM) in fall 2005 and the Centre de Recherches Mathematiques (CRM) at the Universite de Montreal in spring 2006. He was a postdoc at the University of Toronto working with Prof. John Friedlander from July 2006 to June 2008. He moved to NTU in July 2008 and has been working here since. He is interested in analytic number theory as well as functional analysis.

Host: Division of Mathematical Sciences, School of Physical and Mathematical Sciences