Guangzhou Discrete Mathematics Seminar

Spectrum distribution of random Hermitian matrices –
Concentration of the spectrum and distribution
of the largest eigenvalue of random digraphs

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Room 416, School of Mathematics, Sun Yat-sen University

The study of the spectrum of random matrices is an important topic in mathematics. It has been widely used in the fields of nuclei physics, quantum gravity, transportation and communication, and stock issues in financial markets, etc. In this lecture, we will use the well-known Talagrand's concentration inequality to analyze the centralization of the spectrum of Hermitian adjacency matrices of random digraphs, and characterize the distribution of the largest eigenvalue. This work is joint with: Yue Guan, Bo Cheng, Meili Liang, Li Zeng, Jinxun Wang, Minfeng Chen.

QR code of the
seminar series