Seminar
Mathematical Physics

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MPIM Bonn

Extreme gaps for classical random matrices and SYK model

I will mainly present the following two topics in random matrix theory.

Part 1. the extreme gap problems for classical random matrices which includes (a) the smallest gaps for \( C_{\beta E} \) (b) the smallest gaps for GOE (c) the largest gaps for CUE and GUE.

Part 2. the eigenvalues of the Sachdev-Ye-Kitaev model which includes (a) the global density of eigenvalues (b) the central limit theorem of the linear statistics (c) the large deviations and concentration of measures.

Many open problems and conjectures will be presented. If time permits, I will also present our results on the normality of \( C_{\beta E} \).

Thursday, March 17, 2022, 4:00 p.m.
D5-153 and via zoom

Please contact Gernot Akemann (akemann@physik.uni-bielefeld.de) for details regarding access