



**UNIVERSITÄT
BIELEFELD**



Faculty of Physics



Faculty of Mathematics



THE UNIVERSITY OF
MELBOURNE

Seminar

Bielefeld - Melbourne Random Matrices

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Long-range correlations in the superposed random matrix spectra and their applications to complex physical systems

Random matrix theory has played an important role in the understanding of the spectral fluctuations of various physical systems. In these studies, the tools that are widely used include the distribution of spacing, spacing ratios, number variance, etc.

In this talk, I will present recent developments based on the higher-order spacing ratios. Results obtained using the circular ensembles and their superposed spectra will be presented. Finally, their applications to the various complex physical systems will be demonstrated.

Wednesday, 10 November 2021, 0900 hrs CET

**Zoom Conference Call— Please contact Anas Rahman
(anas.rahman@live.com.au) for details regarding access**