



**UNIVERSITÄT
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Faculty of Physics



Faculty of Mathematics



THE UNIVERSITY OF
MELBOURNE

Seminar

Bielefeld - Melbourne Random Matrices

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Multicritical edge/cusp scaling limit in random partitions

A partition is a sequence of non-increasing non-negative integers. It has been known that a random distribution of partitions shows similar properties to random matrices. For example, the scaling behavior of the largest increasing subsequence of random permutation described by the Tracy-Widom distribution is one of the primary results in this direction. In this talk, I would discuss random partitions obeying the Schur measure having potentially infinitely many parameters. In particular, I would show that higher analogs of Airy and Pearcey kernels are obtained in the scaling limit of random partitions, and discuss their properties. This talk is based on <https://arxiv.org/abs/2012.06424> and <https://arxiv.org/abs/2208.07288> in collaboration with A. Zahabi.

**Wednesday, 16 November 2022,
0900 hrs CEST**

Zoom Konferenzschaltung— Please contact Leslie Molag
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