

# Kolloquium Mathematische Physik

## Wintersemester 2012/13

Freitag, 07.12.2012, 15:15 Ort: V2-210/216

### Simone Warzel

Munich and Princeton University

## The localization transition for random operators: recent surprises in the phase diagram on tree graphs

More than 50 years ago Anderson, Mott, Twose, and other physicists have proposed that the incorporation of a random potential in self adjoint operators of condensed matter physics results in a transition in the nature of the eigenstates from extended (e.g., plane waves) to localized, at least in certain energy ranges. The transition is accompanied in the reduction of conduction. As linear operators play key roles in many fields, myriads of other implications, and other interesting aspects (such as changes in the spectral gap statistics) have since then been noted of this transition.

Kaffee und Tee ab 14:30 Uhr in V3-201.

Kontakt: [mbaake@math.uni-bielefeld.de](mailto:mbaake@math.uni-bielefeld.de)

<http://www.math.uni-bielefeld.de/mbaake/math-physik>