

# Mathematical Physics Seminar

**Vlad Margarint**

University of Oxford

## Convergence in High Probability of the Quantum Diffusion in a Random Band Matrix Model

We consider Hermitian random band matrices in  $d > 1$  dimensions. The matrix elements are independent, uniformly distributed random variable if the distance between points is less than the band width, and zero otherwise. In this talk I will present an update of the previous results of the convergence of quantum diffusion in a random band matrix model from convergence of the expectation to convergence in high probability. The proof relies on graphical representations of the various quantities involved in the analysis. This work was done under the supervision of Prof. Antti Knowles.

**Thursday, 17.01.2019, 16:00 Uhr**  
**D5-153**