



## Mathematics and CS Seminar

# On the distribution and fluctuations of eigenvectors of random matrices

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**Host: Laszlo Erdos**

We will study different properties of eigenvectors of random matrices using the dynamical method. In the first part of the talk, I will discuss the distribution and the quantum unique ergodicity property of eigenvectors of deformed Wigner matrices. We will see that eigenvector entries are asymptotically Gaussian with a specific variance localizing them on a small part of the spectrum. The proof relies on a priori local laws for this model and the eigenvector moment flow. In the second part of the talk, I will give some insight in the study of the fluctuations of eigenvectors through the introduction of a new observable following the same eigenvector moment flow.

**Thursday, January 17, 2019 04:00pm - 06:00pm**

IST Austria Campus Big Seminar room Ground floor / Office Bldg West (I21.EG.101)



This invitation is valid as a ticket for the IST Shuttle from and to Heiligenstadt Station. Please find a schedule of the IST Shuttle on our webpage: <https://ist.ac.at/en/campus/how-to-get-here/> The IST Shuttle bus is marked IST Shuttle (#142) and has the Institute Logo printed on the side.