

Seminar/Talk

Rate of convergence of empirical measures of hyperuniform point processes

Sandrine Dallaporta
Université de Poitiers

Host: Laszlo Erdös & Jan Maas

This talk is concerned with the empirical measure of a random point process in R^d, such as the eigenvalues of a random matrix or a Coulomb gas. In several cases, this empirical measure converges towards a deterministic measure. In order to quantify the rate of convergence, weare interested in the p-Wasserstein distance between this random measure and its mean, particularly in dimension 2. We obtain a bound for this distance under some assumption on the p-th centered moment of the number of points in squares, which amounts to hyperuniformity when p = 2. In addition, hyperuniform determinantal point processes will satisfy the required assumptions for any p 1. This is a joint work with Raphael Butez (Université de Lille) and David Garcia-Zelada (Sorbonne Université).

Monday, November 2, 2026 05:00pm - 06:00pm
Central Bldg / O1 / Mondi 2a (I01.O1.008)

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