



Colloquium

Planar Coulomb gases on curves and domains

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Host: Laszlo Erdős & Uli Wagner

I will survey recent work on the partition function of planar Coulomb gases confined to a curve or a region in the complex plane. A basic question is how the geometry or regularity of the curve or boundary of the region is reflected in the asymptotics of the partition function as the number of particles goes to infinity? It turns out that the asymptotic is related to a quantity called the Loewner energy, which has been of interest in other contexts recently, and that the regularity, in the case of a Jordan curve, is that it is a so called Weil-Petersson quasicircle. Based on joint work with Klara Courteaut and Fredrik Viklund.

Wednesday, November 5, 2025 03:30pm - 04:30pm

Raiffeisen Lecture Hall, Central Building



This invitation is valid as a ticket for the ISTA Shuttle from and to Heiligenstadt Station.

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