Probability Seminar

Title: Universal Limits and their Transitions in Random Matrix Theory

Speaker: Thorsten Neuschel (DCU)

Date: Wed 2nd October 2024 at 2:00PM

Location: E0.32 (beside Pi restaurant)

Abstract: By studying the asymptotic behavior of the correlations of a large number of non-intersecting Brownian motions, we demonstrate how universal limits, in the form of the sine, Airy, and Pearcey kernels, arise in Random Matrix Theory. Moreover, we explicitly study the transitions from the Pearcey to Airy, Pearcey to sine, and Airy to sine kernels. This is joint work with Martin Venker.