JAMES MINGO, Queen's University
Fluctuations of Free Wigner Matrices

A Wigner matrix is a self-adjoint (or symmetric) random matrix with i.i.d. entries above the diagonal. Their fluctuations were analyzed by Khorunzhy, Khoruzhenko, and Pastur. We consider the free analogue, i.e. freely independent non-commuting entries and analyze their fluctuations. Instead of non-crossing annular diagrams we get non-crossing linear diagrams. This is joint work with Roland Speicher.