

Dimitri Shlyakhtenko

Random matrices, free probability and applications

In lecture 1, I will talk about free probability and free stochastic differential equations and present some applications to von Neumann algebras;

In lecture 2, we'll discuss Guionnet's work on random matrix ensembles, their combinatorics as well as some applications of techniques from lecture 1;

In lecture 3, we'll discuss connections with and application to, subfactor theory (our joint work with A. Guionnet and V. Jones).