

Probabilistic Operator Algebra Seminar

Organizer: Dan-Virgil Voiculescu

October 5 **Pierre Tarrago**, Sorbonne University

Title: *Spectral deconvolution of unitary invariant models*

In this talk we are interested in the problem of extracting the spectral distribution of a matrix perturbed by the addition or multiplication of a random matricial noise. When the distribution of the noise is known, a method based on subordination functions has recently been introduced to solve numerically this problem. I will explain how using matricial versions of the subordination functions yields concentration bounds on the accuracy of the latter method. In particular, we prove that, when the distribution of the noise is assumed unitarily invariant, the accuracy of the method is similar to the one of a classical deconvolution in the supersmooth case.