# Probabilistic Operator Algebra Seminar

Organizer: Dan-Virgil Voiculescu

November 14     **Hari Bercovici**, Indiana University Bloomington

Title: *The Brown measure of a sum of two free random variables, one of which is R-diagonal.*

Various methods have been devised for the calculation of Brown measures of perturbations of random variables by R-diagonal ones, starting with work of Haagerup and coauthors. Implicit in this early work on additive perturbations is the use of the subordination functions that appear in the in the study of free additive convolution. We show that subordination can be used to gain information about the sum of an arbitrary random variable (in a tracial probability space) with an R-diagonal variable free from it. In many cases, this leads to an explicit calculation of Brown measures. This is joint work with Ping Zhong.