

Probabilistic Operator Algebra Seminar

Organizer: Dan-Virgil Voiculescu

January 25 **Friedrich Goetze**, University of Bielefeld

Title: *Approximation of Free Convolutions by Infinitely Divisible Laws*

Upper bounds for the optimal error of approximation of n -fold free convolutions of a p -measure by free infinitely divisible laws depend on its tail distribution. If this measure is not infinitely divisible and has at least a first absolute moment the minimal approximation admits an exponentially small lower bound in n . Achieving this lower bound can be characterized in terms of the characteristic function and the moments of the measure.