

Probabilistic Operator Algebra Seminar

Organizer: Dan-Virgil Voiculescu

June 21 **Tobias Fritz**, University of Innsbruck

Title: *Categorical probability with Markov categories*

The framework of Markov categories is a recent categorical approach to the mathematical foundations of probability and statistics. It consists of axioms for categories of Markov kernels from which a number of classical results, including 0/1-laws and theorems on sufficient statistics, have been reproven and generalized beyond measure-theoretic probability. In this talk, I will introduce these axioms, explain their measure-theoretic semantics and showcase their utility by presenting a recent proof of the de Finetti theorem.