

Probabilistic Operator Algebra Seminar

Organizer: Dan-Virgil Voiculescu

June 8 **Thomas Sinclair**, Purdue University

Title: *Amenable absorption via free entropy techniques*

We will explain how free entropy techniques can be used to recover a foundational result of Popa on the maximal amenability of a generator masa in a free group factor as well as some further extensions by Houdayer. The key new idea is the use of exponential concentration on a class of random matrix models of a II_1 factor M whose probabilistic expectation simulates the conditional expectation onto a subalgebra $P < M$. This is joint work with Ben Hayes, David Jekel, and Brent Nelson.