

# Probabilistic Operator Algebra Seminar

Organizer: Dan-Virgil Voiculescu

January 23     **Junhao Shen**, University of New Hampshire

Title: *On Voiculescu's Topological Free Entropy for  $C^*$ -algebras*

Free entropy theory, invented by D. Voiculescu, has an influential impact on the study of von Neumann algebras. The notion of topological free entropy, as an analogue of free entropy, was also introduced by Voiculescu in 2002 for  $C^*$ -algebras. In the talk, we provide a survey of our investigation into topological free entropy theory and discuss our computations of topological free entropy dimensions for several classes of  $C^*$ -algebras, including commutative  $C^*$ -algebras, finite-dimensional  $C^*$ -algebras, nuclear  $C^*$ -algebras, and some  $C^*$ -algebras satisfying certain properties.

This is joint work with D. Hadwin, Q. Li and W. Li.