

# Probabilistic Operator Algebra Seminar

Organizer: Dan-Virgil Voiculescu

August 9    **Don Hadwin**, University of New Hampshire

Title: *Voiculescu's Theorem in Properly Infinite Factors*

In 1976 using his noncommutative Weyl-von Neumann Theorem, D. Voiculescu provided an affirmative answer to an open question by P. Halmos, which asked whether a bounded linear operator on a separable Hilbert space is an operator norm limit of reducible operators. In this talk, we will discuss a generalization of Voiculescu's Theorem for separable infinite factors. As applications of our result, we will show that the set of reducible operators in a separable properly infinite factor is operator norm dense and that Voiculescu's bi-commutant theorem holds in certain coronal algebras.