UNIVERSITY OF HOUSTON DEPARTMENT OF MATHEMATICS

Analysis Seminar

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Noncommutative Choquet theory

1:00 pm in 646 PGH November 23, 2019

Abstract

I will present a new framework for noncommutative convexity and noncommutative function theory, along with a corresponding noncommutative Choquet theory that generalizes much of classical Choquet theory. I will also introduce a notion of noncommutative Choquet simplex, which generalizes the classical notion of Choquet simplex and plays a similar role in noncommutative dynamics. I will discuss some applications, including the following extension of Glasner and Weiss's characterization of groups with Kazhdan's property (T): a group has property (T) if and only if whenever it acts on a C*-algebra, the set of invariant states is affinely homeomorphic to the state space of a C*-algebra.