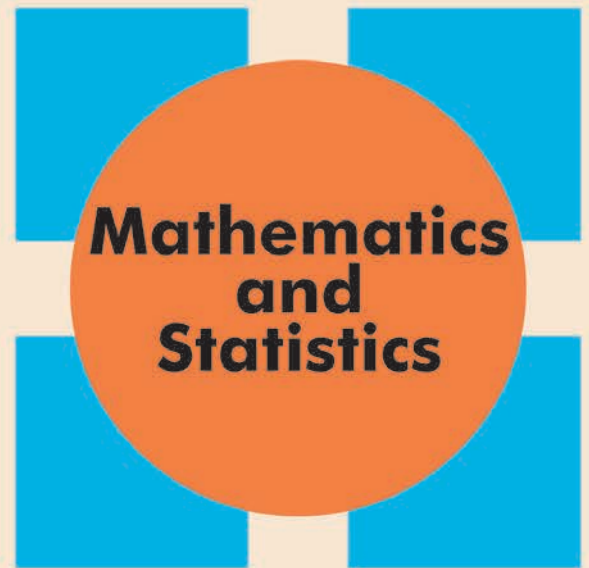


COLLOQUIUM

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Herz–Schur multipliers and approximation properties



Friday, November 24, 2017; 3:30 - 4:30 PM; ED 314

Abstract: Herz–Schur multipliers of a discrete group have proved useful in the study of C^* -algebras, as they can be used to link properties of a group to approximation properties of the associated reduced group C^* -algebra. The development of these ideas has shed light on some C^* -algebra properties, and motivated the introduction and study of others.

I will introduce Herz–Schur multipliers, and discuss some of their applications, before describing a generalisation of these functions to multipliers of a C^* -dynamical system. In the final part of the talk I will show how the generalised Herz–Schur multipliers can be used to study approximation properties of the reduced crossed product formed by a group acting on a C^* -algebra, paralleling the applications of Herz–Schur multipliers; these new tools allow us to study approximation properties of the reduced crossed product without requiring the group to be amenable.