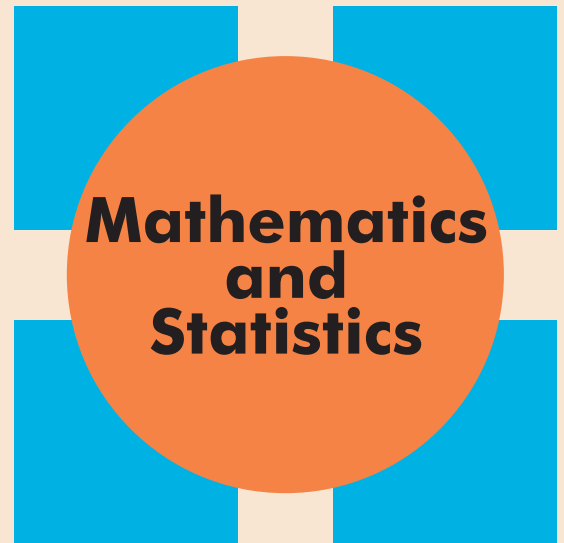


COLLOQUIUM

Jesse Peterson
Vanderbilt University

Character Rigidity in Higher-Rank Groups



Date: Friday February 4, 2022

Time: 3:30 PM

Zoom link:

<https://uregina-ca.zoom.us/j/92508741353?pwd=UzFOMjVMelVhRWhqR215cjd6dTICQT09>

Abstract: A character on a group is a class function of positive type. For finite groups, the classification of characters is closely related to the representation theory of the group and plays a key role in the classification of finite simple groups. Based on the rigidity results of Mostow, Margulis, and Zimmer, it was conjectured by Connes that for lattices in higher rank simple Lie groups, the space of characters should be completely determined by their finite dimensional representations. In this talk, I will discuss the solution to this conjecture, as well as a recent remarkable extension by Boutonnet and Houdayer. I will also discuss the relationship to ergodic theory, invariant random subgroups, and von Neumann algebras.