SCMS Seminar

DIMENSION, COMPARISON, AND ALMOST FINITENESS

Speaker：Prof. David Kerr
Texas A&M University

Time: 3:00 - 4:00 pm, Wednesday, June 14, 2017

Venue: Room 2201, East Guanghua Tower (Main), Fudan University

Abstract: I will explain how one can develop a dynamical version of some of the theory surrounding the Toms-Winter conjecture for simple separable nuclear C*-algebras. In particular, I will introduce a notion of almost finiteness for group actions on compact spaces as an analogue of both hyperfiniteness in the measure-preserving setting and of $\mathcal{Z}$-stability in the C*-algebra setting. This generalizes Matui's concept of the same name from the zero-dimensional context and is related todynamical comparison in the same way that $\mathcal{Z}$-stability is related to strict comparison in the Toms-Winter context. For free minimal actions of countably infinite groups on compact metrizable spaces the property of almost finiteness implies that the crossed product is $\mathcal{Z}$-stable, which leads to new examples of classifiable crossed products.