

THE NUMBER OF ENDS OF BIG MAPPING CLASS GROUPS

Speaker: Josiah Oh
Shanghai Center for Mathematical Sciences

Time: Wed., May 29th, 10:30 – 11:00

Venue: Room 106, SCMS

Abstract:

Geometric group theory is usually concerned with finitely generated groups. However, Rosendal developed a notion of coarse boundedness which allows one to continue using ideas from geometric group theory to study a broader class of topological groups. Recently, Mann--Rafi adapted Rosendal's framework for big mapping class groups, that is, mapping class groups of infinite type surfaces. This naturally leads us to study the large-scale geometry of these groups. For example, a basic first question that can be asked is "Can one classify the number of ends of big mapping class groups?" In this talk, we make sense of this question, and discuss observations from our preliminary investigations that point towards a general conjecture.