

Stable commutator length on big mapping class groups

Elizabeth Field

University of Utah

field@math.utah.edu

The stable commutator length function measures the growth rate of the commutator length of powers of elements in the commutator subgroup of a group. In this talk, we will discuss the stable commutator length function on the mapping class groups of infinite-type surfaces which satisfy a certain topological characterization. In particular, we will show that stable commutator length is a continuous function on these big mapping class groups, as well as that the commutator subgroups of these big mapping class groups are both open and closed. Along the way to proving our main results, we will discuss certain topological properties of a class of infinite-type surfaces and their end spaces which may be of independent interest. This talk represents joint work with Priyam Patel and Alexander Rasmussen.

(joint work with Priyam Patel and Alexander Rasmussen)