
NICHOLAS VLAMIS, University of Michigan

Graphs of curves on infinite-type surfaces

The curve graph of an infinite-type surface has diameter 2, and as such it is not interesting from the perspective of coarse geometry. We study when the mapping class group of an infinite-type surface S admits an action with unbounded orbits on a connected graph whose vertices are simple closed curves on S . We introduce a topological invariant for infinite-type surfaces that determines in many cases whether there is such an action. This is joint work with Matthew Durham and Federica Fanoni.