1116-20-2037

Keith M Jones* (keith.jones@oneonta.edu), Department of Mathematics, Computer Science, and Statistics, SUNY College at Oneonta, 108 Ravine Parkway, Oneonta, NY 13820, and Gregory Kelsey. The Horofunction Boundary of the Lamplighter Group.

While many groups do not enjoy the same geometric properties that hyperbolic or CAT(0) groups enjoy, we can use the horofunction boundary, first introduced by Gromov, to provide any group with a "boundary at infinity" once a generating set has been chosen. This boundary is dependent on generating set, but it provides a topological space on which the group acts, which is metrizable and compact when the group is finitely generated.

In this talk I will describe the structure of the horofunction boundary of the lamplighter group L_2 with the generating set corresponding to the Diestel-Leader graph, in an update to work with my colleague Gregory Kelsey. (Received September 21, 2015)