

Boundaries of $CAT(0)$ Groups with Isolated Flats and The Kapovich-Kleiner Theorem

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Abstract

In 2000 Kapovich and Kleiner proved that if G is a one-ended hyperbolic group that does not split over a two-ended subgroup, then the boundary of G is either a Menger curve, a Sierpinski carpet, or a circle. In this talk I will discuss $CAT(0)$ spaces and their boundaries, as well as what it means for a group to be $CAT(0)$. I will also provide a generalization of the Kapovich and Kleiner theorem to the isolated flats setting. This work is the topic of my dissertation under the advisement of G. Christopher Hruska.