

Convex co-compact groups and relative hyperbolicity

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The notion of convex co-compact groups generalize convex co-compact Kleinian groups from rank one Lie groups to the projective general linear groups of rank at least two. This generalization encompasses many interesting examples coming from Anosov subgroups and non-Gromov hyperbolic projective reflection groups.

In this talk, we will discuss a geometric property (namely, strongly isolated simplices) that completely characterizes relatively hyperbolic convex co-compact groups (with peripheral subgroups virtually Abelian of rank at least two). This is joint work with Andrew Zimmer.

Time permitting, I will mention some results in the case of arbitrary peripheral groups (work in progress with A. Zimmer).