

Dynamics Seminar

Beyond rigidity theorems of Mostow, Sullivan, and Tukia via horospherical foliations

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Abstract: Generalizing Mostow's rigidity theorem, Sullivan and Tukia proved rigidity theorems for divergence-type Kleinian groups in terms of push-forwards of Patterson-Sullivan measures via boundary maps. They have been extended to general rank-one settings by Yue, and to more general representations of rank-one discrete subgroups and Borel Anosov subgroups in my joint work with Oh.

In this talk, I will discuss further generalizations of them to a certain class of higher-rank discrete subgroups. This class includes all rank one-discrete subgroups, Anosov subgroups, relatively Anosov subgroups, and notably, their subgroups. In contrast to the work of Sullivan, Tukia, and Yue, the argument is closely related to studying the ergodicity of higher-rank horospherical foliations, overcoming the lack of CAT(-1) geometry on symmetric spaces.

Note unusual time and place

Tuesday, October 29 at 3:00 PM in 636 SEO