

QUASI-CONFORMAL STRUCTURES ON MORSE BOUNDARIES

Speaker: Qing Liu
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Time: Fri, Mar. 27th, 16:30 - 17:30

Venue: Room 102, SCMS

Abstract:

Boundaries of hyperbolic groups have played a central role in geometric group theory. For non-hyperbolic spaces such as $CAT(0)$ spaces, mapping class groups, and hierarchically hyperbolic groups, the Morse boundary provides a natural generalization by restricting to Morse geodesic rays. Inspired by Paulin's classical rigidity theorem for Gromov hyperbolic groups, we investigate the conditions under which a homeomorphism between the Morse boundaries of two groups is induced by a quasi-isometry of the groups themselves. In this talk, we introduce natural quasi-conformal structures on Morse boundaries and present key rigidity results that extend Paulin's theorem to the Morse setting.