Geometry, Groups and Topology



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A Splitting Theorem for Decomposable Non-negatively Curved Polar Manifolds

Monday, October 10, 2016 10:00 AM (50 minutes)

Polar actions constitute a special yet rich and geometrically significant class of isometric actions on Riemannian manifolds, including actions with orbits of codimension one and isotropy actions of symmetric spaces. Fang-Grove-Thorbergsson proved that any polar action on a closed simply connected Riemanian manifold M with positive (sectional) curvature is equivariantly diffeomorphic to a polar action on a rank one symmetric space, as long as its orbit space has dimension at least two. In this talk I will address to polar actions on Riemanian manifold with non-negative (sectional) curvature where the orbit space splits into a product of Alexandrov spaces. A splitting theorem for the polar manifold will be explained. This is a joint work with K.Grove.

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