

Oberseminar Geometrie und Topologie

Sommersemester
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Prof. Claudio Gorodski

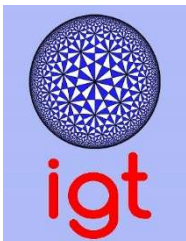
Universidade de São Paulo

Actions on positively curved manifolds and boundary in the orbit space

26.07.2019 – 11 Uhr

Seminarraum IGT, Raum 7.530, Pfaffenwaldring 57

Abstract: We study isometric actions of compact Lie groups on complete orientable positively curved n -manifolds whose orbit space has non-empty boundary in the sense of Alexandrov geometry and prove that for sufficiently large n (in terms of the Lie group), either the group has a fixed point, or a normal subgroup thereof, containing all isotropy groups associated to codimension one strata, has a fixed point. Among our applications, we classify representations of simple Lie groups whose orbit space has non-empty boundary. (Based on joint work with A. Kollross and B. Wilking.)



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