



Seminário de Geometria Diferencial USP-UNICAMP

**Actions on positively curved manifolds and boundary in the orbit
space**

Claudio Gorodski

Universidade de São Paulo

17/05/2019 - sexta-feira

15h às 16h - IME-USP

Resumo: 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 boundary strata, has a fixed point. Among our applications, we classify representations of simple Lie groups whose orbit space has non-empty boundary. (joint work with A. Kollross and B. Wilking).