25 de enero a las 12,30 en el seminario de álgebra

CONFERENCIA

Homeomorphism groups of the cube and other n-manifolds

por el profesor Dale Rolfsen de la Universidad de British Columbia

ABSTRACT: Let $I^n$ denote the unit n-dimensional cube. In joint work with Danny Calegari, we show that the group of piecewise-linear homeomorphisms of $I^n$, fixed on the boundary, is locally indicable and therefore left-orderable.

The same is true more generally for PL manifolds with boundary. Similar results apply in the $C^{\infty}$ category but not in the topological category. Locally indicable means that every nontrivial finitely-generated subgroup has an infinite cyclic quotient, and a group is left-orderable if its elements enjoy a strict total ordering which is preserved under left-multiplication.