Felix Klein Seminar

UNIVERSITY OF NOTRE DAME

Department of Mathematics

Speaker: Wouter Van Limbeek
University of Michigan

Thursday, March 8, 2018
2:00 PM
258 Hurley Hall

Title: Rigidity of warped cones and coarse geometry of expanders

Abstract:

Finitely generated subgroups of compact Lie groups give rise to expander graphs via a warped cone construction. We study the dependence of the coarse geometry of such expander graphs on the original subgroup and establish a dynamical analogue of quasi-isometric rigidity theorems in geometric group theory: Namely, the coarse geometry of the warped cone determines the subgroup up to commensurability, unless the group has abelian factors. This is joint work with David Fisher and Thang Nguyen.