Group actions on manifolds and complexes

Craig Guilbault University of Wisconsin-Milwaukee

Abstract. An important question in geometric topology and geometric group theory asks: If X is a closed aspherical manifold or a finite complex, what can be said about the universal covering space \widetilde{X} ? Many specific questions and conjectures have been formulated along these lines; and many interesting examples and special cases are well understood. Still, very few general results are known.

In this talk we will discuss some of the most intriguing open questions and describe some recent joint work with Ross Geoghegan. Among other things, we will describe a new proof of a well-known theorem by David Wright.