Extended L^2 cohomology and approximation theorems for von Neumann–Betti numbers

Michael Farber
Tel Aviv University

Abstract

I will describe generalizations of a theorem of W. Lueck, answering the question of M. Gromov, about the relation between the Betti numbers of a tower of finite coverings and the von Neumann dimension of the L^2 cohomology of the universal covering.