



WESTFÄLISCHE
WILHELMS-UNIVERSITÄT
MÜNSTER

Friedrich-Hirzebruch-Kolloquium

Homological growth and L^2 -invariants

Professor Wolfgang Lück (Universität Bonn)

13.12.2012, 16:30 Uhr, Hörsaal M 5

There are basic invariants in algebraic topology such as the Euler characteristic, the Betti numbers, the signature, and Reidemeister and Ray-Singer torsion. Given a tower of finite coverings that converges to the universal covering, one may ask whether the sequence of these classical invariants for the members of this tower (divided by the number of sheets) converges. In some interesting cases this is known to be true and the limit in its own right is an interesting invariant, often an L^2 -analog. There are very important cases where one has a good guess about the limit but no proof is known. After a gentle introduction to the classical invariants, we discuss the relevance and the state of art concerning this problem that has created a lot of activities in the recent years.

Tee wird ab 16:00 Uhr im Sitzungszimmer SR o des Mathematischen Instituts serviert.

Im Anschluss an den Vortrag findet ein Empfang im Erdgeschoss des Fachbereichsgebäudes statt.

Fachbereich 10
Mathematik und Informatik
<http://wwwmath.uni-muenster.de>

