Martin Weilandt
Isospectral flat orbifolds

ZEIT:
19.6.2007, 15:30 Uhr

ORT:
HU Berlin
Institut für Mathematik
Rudower Chaussee 25, Raum I.410
12489 Berlin

A Riemannian orbifold is a topological space that is locally homeomorphic to the quotient of a Riemannian manifold by a finite group of isometries. The Laplace operators on these manifolds yield the Laplacian on the entire orbifold. I am going to give an introduction into the spectral geometry of orbifolds and present a few pairs of nonisometric flat orbifolds with the same eigenvalue spectrum of the Laplacian. One of them (found recently by J.P. Rossetti) shows that the spectrum does not determine the orders of the isotropies appearing on an
orbifold, where the isotropy group in a certain orbifold point is the smallest group occuring in some chart around this point.

Kontakt:
Humboldt-Universität zu Berlin . Institut für Mathematik
SFB 647 . Unter den Linden 6 . 10099 Berlin
Tel. +49 30 2093 1804 . Fax. +49 30 2093 2727
sfb647@math.hu-berlin.de