



Leibniz
Universität
Hannover

Oberseminar Analysis und Theoretische Physik

Dr. Zhicheng Han

Riemann Center for Geometry and Physics
Leibniz Universität Hannover

Spectra of Lie groups and L^2 -invariants

In this talk, I will explore the Laplace operator and Dirac operator on semisimple and nilpotent Lie groups. While the parallel problem on symmetric spaces has been well-studied in the last century, the corresponding problem is much less understood in general homogeneous spaces. We will examine the obstacles in extending existing techniques and discuss how some of them can be resolved in the case of group manifolds. Towards the end, we will see how the spectra data shall aid in computing certain topological L^2 -invariants.

**Dienstag, 9.4.2024, 15:00 Uhr, Raum c311
Hauptgebäude der Leibniz Universität**

Dazu laden herzlich ein:

Prof. Dr. Wolfram Bauer, Prof. Dr. Joachim Escher, Prof. Dr. Johannes Lankeit,
Prof. Dr. Elmar Schrohe, Prof. Dr. Alexander Strohmaier,
Prof. Dr. Christoph Walker, Dr. Alden Waters