Leibniz Universität Hannover

Oberseminar Analysis und Theoretische Physik

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Equivariant analytic torsion and an equivariant Ruelle dynamical zeta function

Analytic torsion was introduced by Ray and Singer as a way to realise Reidemeister-Franz torsion analytically. (The equality was independently proved by Cheeger and Müller.) The Ruelle dynamical zeta function is a topological way to count closed curves of flows on compact manifolds. The Fried conjecture states that, for a suitable class of flows, the Ruelle dynamical zeta function has a well-defined value at zero, and that the absolute value of this value equals analytic torsion. With Hemanth Saratchandran, we define equivariant versions of analytic torsion and of the Ruelle dynamical zeta function, which incorporate group actions. This leads to the question under what conditions the resulting equivariant version of Fried's conjecture is true. With Chris Pirie, we have recently obtained positive results on a basic class of flows: suspension flows of isometries.

Dienstag, 15.07.2025, 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, PD Dr. Alden Waters