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Leibniz
Universität
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Oberseminar Analysis und Theoretische Physik

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A cohomological formula for the Atiyah–Patodi–Singer index

We give a cohomological formula for the index of a fully elliptic pseudodifferential operator on a manifold with boundary. As in the classic case of Atiyah–Singer, we use an embedding into an euclidean space to express the index as the integral of a cohomology class depending in this case on a noncommutative symbol, the integral being over a C^∞ -manifold called the singular normal bundle associated to the embedding. The formula is based on a K-theoretical Atiyah–Patodi–Singer theorem for manifolds with boundary that is inspired by Connes' tangent groupoid approach.

**Dienstag, 24.06.2014, 15:15h, Raum g005
Hauptgebäude der Leibniz Universität**

Dazu laden herzlich ein:
Prof. Dr. Joachim Escher
Prof. Dr. Olaf Lechtenfeld
Prof. Dr. Elmar Schrohe
Prof. Dr. Christoph Walker