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Leibniz
Universität
Hannover

Oberseminar Analysis und Theoretische Physik

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Carl von Ossietzky Universität Oldenburg

Geodesics on singular spaces

The geodesics emanating from a point p in a Riemannian manifold together define the exponential map based at p . We consider the question whether there is an exponential map based at a singular point. We give an affirmative answer for special classes of singularities including conical or a cuspidal singularities. However, the exponential map exhibits surprising properties in some cases, like not being injective in any neighborhood of p . Important tools in the study of this question are blow-ups, Hamiltonian systems with degenerate symplectic form and normally hyperbolic dynamical systems.

**Dienstag, 15.5.2018, 15:00 Uhr, Raum c311
Hauptgebäude der Leibniz Universität**

Dazu laden herzlich ein:

Prof. Dr. Wolfram Bauer, Prof. Dr. Joachim Escher, Prof. Dr. Elmar Schrohe,
Prof. Dr. Christoph Walker, Prof. Dr. Emil Wiedemann