

## **Oberseminar Analysis und Theoretische Physik**

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## Model spaces in sub-Riemannian geometry

For a Riemannian manifold, the model spaces of comparison are the Euclidean space and different scaled versions of the sphere and the hyperbolic space. These spaces are, apart from their dimension, uniquely determined by one invariant; their sectional curvature. These model spaces are also characterised by their large isometry groups.

Following the latter point of view, we consider a similar characterization of sub-Riemannian manifolds with whose isometry groups are `maximal' in a certain sense. We show that these manifolds have a canonical partial connection, and several other surprising properties. Looking as the cases of step 2 and step 3 sub-Riemannian manifolds, we show that it is not always possible to characterize sub-Riemannian model spaces by one invariant alone.

## Dienstag, 30.5.2017, 15:00 Uhr, Raum c311 Hauptgebäude der Leibniz Universität

Dazu laden herzlich ein:

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