



Kolloquium über Reine Mathematik

Einladung zu einem Vortrag

Dienstag, 10. Juli 2018

17 Uhr s.t., *Geom H3*

Dr. Stefan Suhr

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(Habitationsvortrag)

On the Problem of Closed Geodesics in Pseudo-Riemannian Geometry

Abstract:

Finding closed geodesics in compact Riemannian manifolds has a long history dating back to Henri Poincaré, who considered them as a test case for the related problem in celestial mechanics. Further David Hilbert with his students studied Riemannian manifolds all of whose geodesics are closed. Over the course of the last century many fields directly grew out of the theory for closed geodesics, e.g. Morse theory, or were inspired by it, e.g. Floer theory. The problem of closed geodesics in pseudo-Riemannian geometry has received considerable less attention. This is related to the lack of comparable mathematical tools, e.g. Morse theory. In my talk I will present several results in connection with the closed geodesics problem in pseudo-Riemannian geometry which are part of my habilitation thesis at the University of Hamburg.

Vor dem Vortrag (ab 16.30 Uhr) stehen im Raum 327 Kaffee und Tee bereit.