Fakultät für Mathematik, Informatik und Naturwissenschaften

Kolloquium über Reine Mathematik

Einladung zu einem Vortrag

Dienstag, 27. Januar 2015

17 Uhr s.t., Geom H4

Prof. Dr. Patrick Massot (École Polytechnique, Palaiseau Cedex)

Curvature and contact topology

<u>Abstract</u>:

Contact structures on 3-manifolds are topological objects which are locally all the same but can have very different global properties. Each contact structure comes with a class of compatible Riemannian metrics. The latter are geometric objects with local invariants. So one would like to know if local properties of compatible Riemannian metrics have an impact on global properties of the contact structure.

This question is still very poorly understood but I'll explain one theorem, proved with John Etnyre and Rafał Komendarczyk, which goes in this direction. The proof uses methods from topology, geometry and analysis but I won't assume any specific knowledge in those areas.

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