



Universität Konstanz

**Fachbereich
Mathematik und Statistik**
Schwerpunkt
Reelle Geometrie und Algebra

Einladung

Im Oberseminar *Reelle Geometrie und Algebra* hält

Johannes Rau

(Eberhard Karls Universität Tübingen)

am **Freitag, 27.01.2017**, einen Vortrag zum Thema:

Real Hurwitz numbers – a tropical approach

Der Vortrag findet um **13:30 Uhr** in **F426** statt.

Alle Interessenten sind herzlich eingeladen.

Abstract: The study of Hurwitz numbers, despite its long history, has been completely remodeled in the last twenty years with the discovery of deep connections for example to Gromov-Witten theory and matrix integrals, originating in string theory. While classical Hurwitz numbers count certain holomorphic maps, sometimes it is natural to look at the "real" version of the problem (counting holomorphic maps compatible with a given real structure). I will present a tropical/combinatorial approach (i.e. based on pair-of-pants decomposition) to calculate such real Hurwitz numbers. If time permits, we will also discuss an approach, based on work of Itenberg and Zvonkine, to turn these numbers into invariants with respect to the position of the branch points (in the spirit of Welschinger invariants).

Sebastian Gruler
Koordinator Oberseminar