



Universität Konstanz

Fachbereich
Mathematik und Statistik
Schwerpunkt
Reelle Geometrie und Algebra

Einladung

Im Oberseminar *Modelltheorie* hält

Vincent Grandjean

(Universidade Federal do Ceará)

am **Montag, 27.02.2017**, einen Vortrag zum Thema:

*Mostowski's Proof of the non oscillation
conjecture in dimension 3*

Der Vortrag findet um **15:15 Uhr** in **F426** statt.

Alle Interessenten sind herzlich eingeladen.

Abstract: Let F be the germ of a real analytic function at the origin O of Euclidean 3-space. Assume the origin O is a critical point of F . If C is any gradient trajectory of F accumulating at O , it was shown by Kurdyka, Mostowski and Parusinski that the limit of secants at O along C exists (this claim was known as Thom's Gradient Conjecture). A related conjecture, stated independently by Moussu and Kurdyka around 1995, is that such a gradient trajectory would not oscillate at O . Non-oscillation at O means the following: given the germ at O of any semi-analytic set S , the trajectory C must either never intersect S close to O , or being contained in S once close enough to O . Mostowski has a proof of the non-oscillation conjecture in dimension three. In the talk I will present some ingredients and steps of Mostowski's proof.

Sebastian Gruler
Koordinator Oberseminar