



Universität Konstanz

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

Einladung

Im Oberseminar *Modelltheorie* hält

Patrick Speissegger

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am **Montag, 14.11.2016**, einen Vortrag zum Thema:

Quasianalytic Ilyashenko algebras

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

Alle Interessenten sind herzlich eingeladen.

Abstract: In 1923, Dulac published a proof of the claim that every real analytic vector field on the plane has only finitely many limit cycles (now known as Dulac's Problem). In the mid-1990s, Ilyashenko completed Dulac's proof; his completion rests on the construction of a quasianalytic class of functions. Unfortunately, this class has very few known closure properties. For various reasons I will explain, we are interested in constructing a larger quasianalytic class that is also a Hardy field. This can be achieved using Ilyashenko's idea of superexact asymptotic expansion. (Joint work with Tobias Kaiser)

Sebastian Gruler
Koordinator Oberseminar