

Im Oberseminar

Deformationsquantisierung

spricht am **11.12.2015 um 14 Uhr c.t.**,

im Seminarraum 00.009 (Physik Ost)

THORSTEN REICHERT

über das Thema:

Introduction to Synthetic Differential Geometry

Following the well known “Pizza Seminar” talk of Michael Shulman on the topic, we will give an introduction to the very basic ideas and concepts of synthetic differential geometry. Starting off with an “axiomatic wishlist” on differential calculus, we will introduce nilsquare infinitesimals, that is elements of a field which square to zero, and explore their implications. As is to be expected, there are various problems involving the naive definition of nilsquares and we will have to look for ways to deal with them (which will include a short discourse into constructive logic). Finally, we will use those concepts to set up geometry on certain (microlinear) spaces, including a discussion on tangent vectors and their properties.

gez. Stefan Waldmann