



Oberseminar
Geometrische Analysis und Allgemeine Relativitätstheorie

Am Donnerstag, den 22.05.2014 spricht um **14 Uhr c.t.** im Raum **N14**

Prof. Dr. Juan J. L. Velázquez

(Hausdorff Research Institute for Mathematics Bonn)

über das Thema

**Singularity formation for kinetic equations
with cubic nonlinearities**

In this talk I will discuss some recent results concerning the formation of singularities for two particular kinetic equations, namely Nordheim's equation for bosons and the Weak Turbulence kinetic equation associated to the Nonlinear Schrödinger Equation. The solutions of these equations can yield singularity formation in finite time for spatially homogeneous particle distributions. The physical significance of these singularities will be discussed. Seemingly, this singular behaviour is related to the formation of Bose-Einstein condensates. Issues like the long time asymptotics for the solutions of the Weak Turbulence Equation will be also discussed. (joint work with M. Escobedo).

Hierzu wird herzlich eingeladen.

C. Cederbaum, G. Huisken