



# Kolloquium über Reine Mathematik

Einladung zu einem Vortrag

Dienstag, 24. April 2018

17 Uhr s.t., Geom H4

Prof. Dr. Jens Hornbostel  
(Bergische Universität Wuppertal)

*Characteristic classes for topological  
and algebraic vector bundles*

## Abstract:

We survey the theory of Chern and Euler classes, first for topological vector bundles on manifolds and then for algebraic vector bundles over algebraic varieties. Over base fields other than the complex numbers, analyzing the latter, requires a refinement of Chow groups as we will explain. These are the so-called Chow-Witt groups, as introduced and studied by Morel, Fasel and others. We conclude with the computation of all characteristic classes in Chow-Witt theory for the universal oriented vector bundle of a given dimension, which is joint work with Matthias Wendt.

Vor dem Vortrag (ab 16.30 Uhr) stehen im Raum 327 Kaffee und Tee bereit.