

# E i n l a d u n g

zum

Kolloquium des Mathematischen Instituts  
(unterstützt durch GK Topologie und Metageometrie und  
Leibniz-Preis)

am Donnerstag, 15.07.2010 um 16:30 Uhr, im Hörsaal M5, spricht

**Professor Dr. Anton Deitmar**

(Universität Tübingen)

über das Thema:

**„Automorphic forms of higher order “**

Abstract:

Classical modular forms are holomorphic functions on the upper half plane which are invariant under the action of, say, the group  $G = \mathrm{SL}(2, \mathbb{Z})$ . Higher order forms are functions, which are not invariant, but become invariant when one applies the operator  $(g-1)$  for  $g$  in  $G$ . For instance, the integral of a modular form is a higher order form. Similar to the case of modular forms, one can attach L-functions to higher order forms. In order to relate these to other types of L-functions one would like to establish an operation of the Hecke-algebra on higher order forms. This can indeed be done and the nature of the resulting Hecke-module will be revealed in the talk.

Tee wird ab 16 Uhr im SR0 des Mathematischen Instituts serviert.