



# 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, 17.06.2010 um 16:30 Uhr, im Hörsaal M5, spricht

**Professor Ken Dykema**

(Texas A&M University)

über das Thema:

**„On approximation of groups by permutations and operators  
by matrices “**

Abstract:

A sofic group is one that can be approximated by permutations of finite sets in a particular sense. This notion was introduced by Gromov, and it is an open question whether all groups are sofic. An analogous question is Connes' embedding problem, which is equivalent to asking whether all operators (in von Neumann algebras with traces) can be approximated by matrices, in a specific sense. These questions and some partial results (involving amalgamated free products) will be discussed, and familiarity with von Neumann algebras will not be assumed.

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