

## Einladung

zum

Kolloquium des Mathematischen Instituts (unterstützt vom Graduiertenkolleg und Leibniz-Preis)

am Donnerstag, 28.01.2010 um 16:30 Uhr, im Hörsaal M5, spricht

## Professorin Dr. Donna Testerman

(Universität Lausanne)

über das Thema:

"Subgroup structure and representation theory"

## Abstract:

Groups of Lie type arise naturally as groups of isometries of certain classical geometries, as automorphism groups of 'non-classical' geometric structures defined by Tits. The finite forms of these groups give rise, along with the alternating groups, to the large majority of the finite non-abelian simple groups. The groups of Lie type defined over an algebraically closed field include the semisimple linear algebraic groups. All of these families of groups play an important role in group theory, geometry and physics. We will give a survey talk about old and new results on the subgroup structure of these groups and indicate how their representation theory plays a key role in this study. In particular, we discuss what is known about the maximal subgroups of the finite simple groups of Lie type and the simple linear algebraic groups, and point out some important open questions.

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