# Mathematisches Kolloquium

Am Freitag, dem 08. Juli 2016 spricht um 14 Uhr c. t. im Hörsaal IV
der Fachrichtung Mathematik (Gebäude E2 4)

## Prof. Dr. Drew Armstrong
## University of Miami

über das Thema:

## The McKay Correspondence

*Abstract:*   Here is a basic problem: Find all positive integers $p, q, r$ such that $1/p + 1/q + 1/r > 1$.
This problem shows up surprisingly often and its solution is usually expressed in terms of the
Coxeter-Dynkin diagrams of type ADE. Two such 'ADE classifications' are given by:

1. The Platonic solids and finite subgroups of SO(3), SU(2), or SL(2,$\mathbf{C}$).

2. Symmetric 0,1 matrices with spectral radius less than 2.

The equation $1/p + 1/q + 1/r > 1$ occurs naturally in Problem 1, but its appearance in Problem
2 was initially quite mysterious. Then in 1980 the mathematician John McKay made a startling
observation that provides a direct link between Problems 1 and 2. In this talk I will give an
elementary introduction to both problems and then I will describe McKays Correspondence.

Der Gast wird von Prof. Dr. Roland Speicher betreut.

Alle Interessenten sind zum Vortrag herzlich eingeladen.

Kaffee und Tee ab 13.45 Uhr im Konferenzraum der Mathematik    (Erdgeschoss, Raum 103)

## Die Dozenten der Mathematik