



Mathematisches Kolloquium

Am Freitag, dem 06. November 2015 spricht um 14 Uhr c. t. im Hörsaal IV
der Fachrichtung Mathematik (Gebäude E2 4)

**Prof. Dr. Michael Skeide
University of Molise, Campobasso, Italy**

über das Thema:

One-Parameter Semigroups of Isometries on Hilbert Modules

Abstract: Semigroups - or, better, one-parameter semigroups - occur as attempts to describe irreversible (classical and quantum) dynamical systems. Frequently, these systems are modelled conveniently on Hilbert modules or algebras of operators on them.

Hilbert modules are generalizations of Hilbert spaces. Frequently, when we need a result for Hilbert modules that is well-known for Hilbert spaces, we need more efficient proofs.

In this talk, we discuss semigroups of isometries on Hilbert modules. We present an elementary proof of the fact that so-called pure semigroups of isometries are shifts. This proof is new also for Hilbert spaces. Then we examine to what extent the classical decomposition of an isometry semigroup into a pure and a unitary part can be saved for Hilbert modules.

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

Alle Interessenten sind zum Vortrag herzlich eingeladen.

Kaffee und Tee ab 13.45 Uhr im Didaktiklabor der Mathematik (Erdgeschoss, Raum 114)

Die Dozenten der Mathematik