



# Kolloquium über Reine Mathematik

Einladung zu einem Vortrag

**Dienstag, 29. November 2016**

17 Uhr s.t., Geom H4

Akhil Mathew

(Harvard University, Cambridge)

## ***The descent problem in the algebraic K-theory of ring spectra***

### Abstract:

A classical result of Thomason (later improved by the work of Voevodsky-Rost) states that a large piece of the algebraic K-theory of schemes can be calculated by a "local-to-global" methods; in particular, it gives a close relationship between algebraic and topological K-theory for varieties over the complex numbers.

We develop a partial analog of Thomason's theorem in the algebraic K-theory of structured ring spectra. The key input, which comes from stable homotopy theory, is a criterion for nilpotence in  $E_\infty$ -ring spectra. This is joint work with Dustin Clausen, Niko Naumann, and Justin Noel.

Vor dem Vortrag (ab 16.30 Uhr) stehen im Raum 327 Kaffee und Tee bereit.