



# Kolloquium über Reine Mathematik

Einladung zu einem Vortrag

**Dienstag, 2. Mai 2017**

17 Uhr s.t., Geom H4

Prof. Dr. Holger Reich  
(FU Berlin)

## *Algebraic K-theory and topological cyclic homology*

### Abstract:

The Whitehead group  $Wh(G)$  of a group  $G$  and its higher analogues defined using algebraic K-theory play an important role in geometric topology. There are vanishing conjectures in the case where  $G$  is torsionfree. For groups containing torsion the Farrell-Jones conjectures give a conjectural description in terms of group homology and assembly maps. In the talk I will try to give an accessible introduction to this circle of ideas. I will also discuss assembly maps for topological cyclic homology at a prime  $p$  instead of algebraic K-theory. All new results constitute joint work with Wolfgang Lueck (Bonn), John Rognes (Oslo) and Marco Varisco (Albany).

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