



SFB-Seminar (Teilprojekt C1)

ZEIT:

11.5.2015, 14:00 Uhr - 17:00 Uhr

ORT:

Freie Universität Berlin
Konrad-Zuse-Zentrum für Informationstechnik, Hörsaal ZIB
Takustr. 7
14195 Berlin-Dahlem

PROGRAMM:

14:00 - 14:30 Kaffee Pause

14:30 - 15:30 **Prof. Dr. Holger Reich (FU)**

The Farrell-Jones conjecture - Introduction and Overview

The Whitehead group $Wh(G)$ of a group G and its (higher) analogues defined using algebraic K -theory or L -theory play an important role in geometric topology. This will be made explicit in the second talk. There are vanishing conjectures in the case where G is torsionfree. For groups containing torsion the Farrell-Jones conjecture predicts what should happen in terms of group homology. The talk will give a gentle introduction to this circle of ideas and survey the current status of the conjectures.

15:30 - 16:00 Kaffee Pause

16:00 - 17:00 **Prof. Dr. Arthur Bartels (Universität Münster)**

Existence and uniqueness of aspherical manifolds with hyperbolic fundamental group

Via surgery the Farrell-Jones Conjecture has applications to the classification of topological manifolds. For hyperbolic groups this conjecture is known. We will discuss its proof and applications to existence and uniqueness of aspherical manifolds with hyperbolic

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fundamental groups.

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