

Georgian-German non-commutative partnership (topology, geometry, algebra)

Initiative: Zwischen Europa und Orient - Mittelasien/Kaukasus im Fokus der Wissenschaft

Bewilligung: 07.04.2009

Laufzeit: 2 Jahre

This proposal aims at supporting joint research projects between German and Georgian mathematicians in the areas of topology, geometry, and algebra. We plan to study fundamental questions in K-theory, homotopy theory, noncommutative geometry, and categorical and homological algebra, using, in particular, methods of enriched category theory. More concretely, it is planned to study the following topics: smooth K-theory for locally convex algebras, the connection between algebraic and topological K-theory and group cohomology, equivariant and Hopf-cyclic homology, cohomology of groups, spectra characterizing KK-theory, applications of derived functors and derived categories to cyclic homology and K-theory, structural properties of K-theory of bimonoidal categories, and formal group laws.

Projektbeteiligte

Prof. Dr. Thomas Schick

Universität Göttingen
Mathematisches Institut
Göttingen

Prof. Dr. Hvedri Inassaridze

I. Javakhishvili Tbilisi
State University
Tbilisi Center for Mathematical Sciences and
A. Razmadze Mathematical Institute
Tbilisi
Georgien

Prof. Dr. Ralf Meyer

Universität Göttingen
Mathematisches Institut
Göttingen

Prof. Dr. David John Green

Universität Jena
Mathematisches Institut
Jena

Prof. Dr. Jens Hornbostel

Universität Bonn

Mathematisches Institut

Bonn

Prof. Dr. Birgit Richter

Universität Hamburg

Department Mathematik

Hamburg