VolkswagenStiftung

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

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