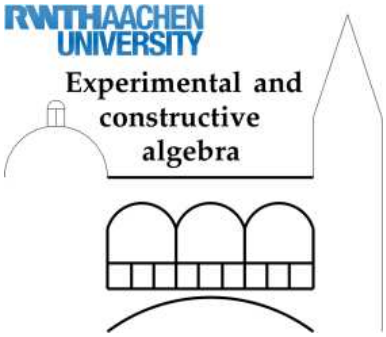
Graduiertenkolleg

Experimentelle und konstruktive Algebra



Vortrag

Dienstag, 12. Juli 2011, 15:30 Uhr, Hörsaal IV

Anne Shepler (University of North Texas, USA)**:**
Lie Orbifold Algebras and Hochschild Cohomology

Consider a finite group acting linearly on a finite dimensional vector space. The group acts as automorphisms on the polynomial ring of the vector space, and one captures both the group action and the abstract group structure with the skew group algebra. (The skew group algebra is the natural semi-direct product algebra generated by polynomials on the space together with group elements.) Deformations of skew group algebras include Drinfeld (graded) Hecke algebras, rational Cherednik algebras, symplectic reflection algebras, and universal enveloping algebras of Lie algebras with group actions. We examine such deformations as quotients of a free algebra by an ideal of relations. Hochschild cohomology frames a Poincare-Birkhoff-Witt property and allows us to describe those quotients defining formal deformations.

Wir laden alle Interessierten herzlich ein.