Contents

Main Lectures

The main lectures will present important recent advances in the subject and decisive relations to other parts of mathematics. The aim of these lectures is to outline developments which are of interest to a general audience; they should be comprehensible not only for experts, but for mathematicians say with some working knowledge in algebra, including graduate students.

Hans Joachim Baues (Bonn, Germany): "Matrix problems arising in the classification of homotopy types"

Raymundo Bautista (UNAM, Mexico): "On some Tame families of modules"

Thomas Brüstle (Bielefeld, Germany), Lutz Hille (Hamburg, Germany) and Gerhard Röhrle (Bielefeld, Germany): "Actions of algebraic groups and quasi-hereditary algebras"

Jon Carlson (Athens, USA): "The vanishing of group cohomology and subcategories of the stable category"

William Crawley-Boevey (Leeds, England): "Kac's Theorem and deformed preprojective algebras"

Rolf Farnsteiner (Milwaukee, USA): "Representations of infinitesimal group schemes"

Christof Geiss and José Antonio de la Pena (UNAM, México): "Auslander Reiten components for clannish algebras"

Gordon James (London, England): "Symmetric groups and related algebras"

Mikhail Kapranov (Evanston, USA): "Applications of derived equivalences to Hall algebras"

Alexander Kleshchev (Eugene, USA): "Modular Littlewood-Richardson coefficients"

Steffen König (Bielefeld, Germany): "On characteristic tilting modules"

Olivier Mathieu (Strasbourg, France): "Some applications of tilting modules"

Sergei Ovsienko (Kiev, Ukraine): "Categorical methods in representation theory"

Markus Reineke (Wuppertal, Germany): "Generic extensions and Hall algebras at q=0"

Idun Reiten (Trondheim, Norway): "Some thoughts on problems and directions in the representation theory of algebras"

Andrzej Skowronski (Torun, Poland): "Geometry of modules over tame quasi-tilted algebras"

Katsuhiro Uno (Osaka, Japan): "How special are representations of finite group algebras?"

Michel Van den Bergh (Hasselt, Belgium): "On the number of absolutely indecomposable representations of a quiver over a finite field"

Kari Vilonen (Waltham, USA): "Modular representations and the affine Grassmannian"

Jerzy Weyman (Boston, USA): "The multiple flag varieties and generalized quivers"

Jie Xiao (Beijing, China): "Derived Category and Kac-Moody algebra"

Grzegorz Zwara (Torun, Poland): "Degenerations of modules are given by extensions"

Computer algebra session

Peter Dräxler (Bielefeld, Germany): "Computer algebra packages for problems in representation theory"

Short Communications

The organizers have used all their efforts to arrange the program in such a way that it allows as many of the partipants as possible to report on their new results. Due to lack of time, a decisive selection had to be made. For the benefit of the participants, all the abstracts obtained in time (including those not scheduled in the program) are included in this collection.

István Agoston (Budapest, Hungary): "A generalization of quasi-hereditary algebras"

Toma Albu (Milwaukee, USA): "Double infinite chain condition, and generalized deviations of posets and algebras"

Lidia Angeleri Hügel (München, Germany): "Tilting and cotilting classes in Mod(R)"

Pham Ngoc Anh (Budapest, Hungary): "Hall polynomials for $\tilde{A}_n$"

Regina Maria de Aquino (Sao Paulo, Brasil) "Over Koszul-Tiltings Algebras"

Vyacheslav Artamonov (Moscow, Russia): "Quantum polynomials and their representations"

Tsunenobu Asai (Kinki University, Osaka, Japan): On the number of crossed homomorphisms"