



Oberseminar zur Algebra und Algebraischen Kombinatorik

Jun.Prof. Dr. Susanne Danz
(TU Kaiserslautern)

Vortragsänderung!!!

"Quasi-hereditary twisted category algebras"

In this talk we shall consider twisted category algebras over fields of characteristic 0. The underlying category will always be finite and will have an additional property, which is called 'split'. The multiplication in such an algebra is essentially induced by the composition of morphisms in the category. Prominent examples of twisted category algebras are various classes of diagram algebras (for suitable parameters) such as Brauer algebras, Temperley-Lieb algebras, or partition algebras. Twisted category algebras also arise in connection with double Burnside rings and biset functors.

We shall show that a twisted split category algebra in characteristic 0 is quasi-hereditary, that is, the corresponding module category is a highest weight category. Moreover, we shall give an explicit description of its standard modules with respect to a particular partial order on the set of isomorphism classes of simple modules. This provides, in particular, a unified proof of the known fact that the aforementioned diagram algebras are quasi-hereditary.

This is joint work with Robert Boltje.

Montag, 13.01.2014
ab 14:15 Uhr, Raum a410
Hauptgebäude der Leibniz Universität Hannover

Alle Interessierten sind herzlich eingeladen.

gez. Prof. Dr. C. Bessenrodt

Institut für Algebra, Zahlentheorie
und Diskrete Mathematik