Oberseminar
zur
Algebra und Algebraischen Kombinatorik

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„Irreducible tensor products of representations of symmetric groups"

For symmetric groups it was proved by Zisser that in characteristic 0 no non-trivial irreducible tensor products exist (that is irreducible tensor products of two representations of dimension greater than 1). When considering modular representations it has already been observed that there are examples of non-trivial irreducible tensor products.

It was conjectured by Gow and Kleshchev that, for symmetric groups, non-trivial irreducible tensor products can only occur in characteristic 2 and in this case they also conjectured which tensor products are irreducible. This conjecture has been proved by Bessenrodt and Kleshchev apart for the case *n* even in characteristic 2, in which case some conditions were given for a tensor product to be irreducible. Further Graham and James proved that the tensor products conjectured by Gow and Kleshchev to be irreducible were actually so.

In this talk I will show how to prove the conjecture in the remaining case *n* even in characteristic 2. To do this I will use the structure of some specific permutation modules and the dimensions of certain homomorphism spaces.

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ab 14:00 Uhr, Raum a410
Hauptgebäude der Leibniz Universität Hannover

Alle Interessierten sind herzlich eingeladen.

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