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# Oberseminar zur Algebra und Algebraischen Kombinatorik

Cosima Aquilino  
(Universität Bielefeld)

## “The monoidal structure of strict polynomial functors”

The category of strict polynomial functors inherits an internal tensor product from the category of divided powers. This monoidal structure also yields a tensor product for the category of modules over the Schur algebra  $S_k(n;d)$ , indeed the two categories are equivalent for  $n>d$ .

To investigate this monoidal structure, we consider the category of modules over the symmetric group algebra  $kS_d$  which admits a tensor product coming from its Hopf algebra structure. Based on work by Schur, there exists a functor  $F$  going from the category of strict polynomial functors to the category of modules over the symmetric group. We show that the functor  $F$  is monoidal.

This is joint work with Rebecca Reischuk.

Montag, 19.01.2015  
ab 14:15 Uhr, Raum a410  
Hauptgebäude der Leibniz Universität Hannover

Alle Interessierten sind herzlich eingeladen.

Institut für Algebra, Zahlentheorie  
und Diskrete Mathematik