

## Fifth annual conference of the SFB-TRR 195

Tuesday, Sept 14, 10:05 am

**Verity Mackscheidt**

**PBW deformations of smash products**

Starting from a graded algebra given by generators and relations, one can deform the algebra by deforming the relations. In this talk, a special class of deformations, called PBW deformations, will be presented. They include well-known special cases, e.g. Hecke algebras and Cherednik algebras for finite groups or infinitesimal versions thereof for Lie algebras, but the theory contains interesting open questions in general. This talk focuses on PBW deformations related to algebraic groups and investigates some representation-theoretic aspects, such as the study of central elements.