

**November 15:** Johannes Flake (Rutgers), *Dirac cohomology, Hopf-Hecke algebras and infinitesimal Cherednik algebras.*

Dirac operators have proved a useful tool in the representation theory of different algebraic objects such as reductive Lie groups or various Hecke algebras. We show that these cases can be treated uniformly by viewing them as certain PBW deformations involving Hopf algebras. In this generalized situation, we prove a version of Vogan's conjecture, which relates Dirac cohomology with central characters. This generalizes corresponding results in known special cases. Infinitesimal Cherednik algebras of the general linear group turn out to be a novel special case. We also obtain partial results on the classification of the studied deformations.