1083-22-193 **Myron Minn-Thu-Aye*** (`mminnt1@math.lsu.edu`). *Multiplicity formulas for perverse coherent sheaves on the nilpotent cone.* Preliminary report.

Bezrukavnikov has shown that the category of perverse coherent sheaves on the nilpotent cone of a complex reductive algebraic group is quasi-hereditary. The Andersen–Jantzen sheaves play an important role, analogous to that of the Verma modules in category $\mathcal{O}$. We describe progress towards computing multiplicities of simple objects in Andersen–Jantzen sheaves. The main tool is an equivalence between perfect complexes on the nilpotent cone and mixed sheaves on the affine Grassmannian. (Received August 27, 2012)