1067-14-2112 **Fyodor Malikov*** (fmalikov@usc.edu), 3620 So.Vermont Ave, Math.Dept., USC, Los Angeles, CA 90089. Drinfeld-Sokolov reduction and algebras of chiral differential operators.

Upon reviewing the definition of Drinfeld-Sokolov as an algebraic version of Hamiltonian reduction, we will prove that sometimes it can be described as a right derived functor. Time permitting, we will demonstrate how this result can be used to compute the cohomology of some sheaves of affine Lie algebra modules over flag manifolds. (Received September 22, 2010)