

## On deformation of nilpotent cones and Springer correspondences

### Abstract

The Springer correspondence is a geometric construction of Weyl group representations from nilpotent orbits of semi-simple Lie algebras. In our previous work, we found an analogous construction, which relates orbits of certain nilcones to representations of Weyl groups of type C. In this talk, we present a certain kind of deformation of our nilcones to the usual nilpotent cones of symplectic groups, which exists only in characteristic two. This enables us to compare the usual Springer correspondence and our correspondence (together with their basis) over the field of complex numbers.