April 11: Simon Riche (Université Blaise Pascal - Clermont-Ferrand II) Geometric Satake, Springer correspondence, and small representations.

We will describe a joint work with P. Achar, A. Henderson and D. Juteau which gives a geometric construction relating two fundamental constructions in geometric representation theory, the Satake equivalence and the Springer correspondence. More precisely we will describe a functor from perverse sheaves on the "small" part of the affine Grassmannian of a reductive group G to perverse sheaves on the nilpotent cone of G which realizes geometrically the functor which sends a (small) module for the Langlands dual group to its weight zero subspace (a representation of its Weyl group).