



Speaker: Daniele Rosso
Indiana University Northwest

Wednesday, September 6, 2017
3:00 PM
258 Hurley Hall

Title: Irreducible components of exotic Springer fibers

Abstract:

The Springer resolution is a resolution of singularities of the variety of nilpotent elements in a reductive Lie algebra. It is an important geometric construction in representation theory, but some of its features are not as nice if we are working in Type C (Symplectic group). To make the symplectic case look more like the Type A case, Kato introduced the exotic nilpotent cone and its resolution, whose fibers are called the exotic Springer fibers. We give a combinatorial description of the irreducible components of these fibers in terms of standard Young bitableaux and obtain an exotic Robinson-Schensted correspondence. This is joint work with Vinoth Nandakumar and Neil Saunders.