Sjuvon Chung
Rutgers University

Sheaf Euler Characteristics in Cominuscule Quantum K-Theory

Thursday, October 20, 2016
1:15 p.m. in ES-143

Abstract. Let $X = G/P$ be a flag variety with the action of a torus $T = (\mathbb{C}^*)^n$. Its $T$-equivariant quantum $K$-theory ring is a deformation of the Grothendieck ring of $T$-equivariant coherent sheaves on $X$. We will present a brief overview of these rings before we discuss three curious properties of the equivariant quantum $K$-theory ring for $X$ cominuscule. These properties relate the ring structure to sheaf Euler characteristics and to the geometry of rational curves in $X$. This is joint work with Anders Buch.