Algebra/Topology Seminar

Changjian Su
Columbia University

CSM Classes, Characteristic Cycles, and Stable Basis

Thursday, October 27, 2016
1:15 p.m. in ES-143

ABSTRACT. The stable basis for $T^*(G/B)$ (more generally, symplectic resolutions) is defined by Maulik and Okounkov for the computation of quantum cohomology. It turns out they are just the characteristic cycle of D-modules on flag variety G/B. Pulling back to G/B, we get Chern-Schwartz-MacPherson class (CSM class) of Schubert cells. Changing the equivariant parameter, it becomes the dual of the CSM class. Dividing by certain powers of equivariant parameter, we get the Schubert variety. This is joint work with P. Aluffi, L. Mihalcea, and J. Schuermann.