

ALGEBRAIC GEOMETRY AND COMMUTATIVE ALGEBRA SEMINAR

Speaker: Kostya Timchenko

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Date: Wednesday, October 2, 2019

Time: 3:00 PM

Location: 258 Hurley Hall

Lecture Title:

Characteristic cycles for K -orbits on Grassmannians

Abstract

Bressler-Finkelberg-Lunts showed that the characteristic cycle of the IC-sheaf associated to any Schubert variety in the Grassmannian is irreducible. We consider the case of K -orbits on Grassmannians, where K is the connected component of the fixed point set of an involution of $GL(n)$. We compute the characteristic cycles associated to these orbits. They are irreducible for $K = GL(p) \times GL(q)$ and $Sp(2n)$. When K is $SO(n)$, roughly half of them are irreducible.