

abstract

ALGEBRAIC GROUPS AND CONVEXITY SEMINAR

Topic:

Speaker:

Affiliation:

Date:

Time/Room:

Equivariant localization provides a powerful method for explicitly computing equivariant and ordinary cohomology rings of spaces with large symmetry groups. One of the most useful localization formulas, due to Goresky-Kottwitz-MacPherson, describes the image of the localization to the fixed-point set of a torus T acting on a nice (smooth, complete e.g.) variety X which has finitely many fixed points and one-dimensional orbits.

If X has positive-dimensional families of one-dimensional orbits, the GKM relations are still true, but are not sufficient. We describe additional relations coming from such families and prove that they are enough when the closures of the families are toric varieties.

We apply this to the quot scheme, which is a compactification of the space of maps from P^1 to a Grassmannian with a given degree.

Joint work with Linda Chen and Frank Sottile