

Queen's Algebraic Geometry — Seminar —

EQUIVARIANT CLASSES OF MATROID REALIZATION SPACES

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Abstract

We will discuss equivariant classes represented by invariant varieties in a representation, some motivations (singularity theory, Schubert calculus, cohomology rings of moduli spaces), and computational strategies. The example of matroid realization spaces will be considered in detail, with applications to school geometry (e.g. Given 8 generic lines l_1, \dots, l_8 , and a point Q in the plane, how many Pappus configurations P_1, \dots, P_9 exist with $P_i \in l_i$, and $P_9 = Q$?). Joint work with L. Feher, A. Nemethi.

Monday, January 14, 2008
4:30pm – 5:30pm
319 Jeffery Hall