Stanford Algebraic Geometry Seminar

DEGENERACY LOCI, EQUIVARIANT COHOMOLOGY, AND QUIVERS

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Abstract

Let $F_0 \to F_1 \to \ldots \to F_n$ be a sequence of vector bundles over a manifold M, and $s_1, \ldots, s_n$ generic maps between them. Where do these maps drop rank (i.e., what is the cohomology class of this locus)? Though apparently a question in topology, one can use equivariant cohomology to turn it into an algebro-geometric one, and degeneration techniques to give a "positive" formula, involving beautiful combinatorics. Along the way we'll also see Gröbner bases, Schubert varieties, and maybe even the Zelevinsky map.
This work is joint with Ezra Miller and Mark Shimozono.

Friday, February 7
4:40 p.m.
(Note unusual time!!)
Room 383-N

`http://math.stanford.edu/~vakil/seminar0203/seminar.html`.