Front Range Algebra GeoMEtry and Number Theory Seminar

REFINEMENTS AND GENERALIZATIONS OF DETERMINANTAL LOCI

Brian Osserman

UC Davis

We present some results on classical determinantal loci which describe their behavior in terms of kernels of the associated maps. This suggests that there may be an alternative definition of determinantal loci expressed in terms of kernels rather than determinants, although thus far such a definition is elusive. We use these ideas to develop a generalization of determinantal loci to pushforwards of sheaves under proper morphisms, and sketch how this can in turn be used in Brill-Noether theory.

April 30, 2013
3:00 p.m.
MATH 350