

ALGEBRAIC GEOMETRY AND COMMUTATIVE ALGEBRA SEMINAR

Speaker: Geoffrey Smith
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Date: Tuesday, October 26, 2021

Time: 2:30 PM

Location: 125 Hayes-Healy Hall

Zoom URL:

Lecture Title:

Very free rational curves in Fano varieties

Abstract

I will present a result allowing us to control the normal bundle of a rational curve in certain complete intersections in a variety X . In particular, given a rational curve C in X , under certain hypotheses this control allows us to find complete intersections in X such that the normal bundle to C in Y is "as general as possible." By using this tool, I will present some new examples of separably rational connected Fano varieties in arbitrary characteristic. For instance, a general Fano complete intersection of hypersurfaces of degree at least 3 in a Grassmannian is separably rationally connected in any characteristic. This talk is based on joint work with Izzet Coskun.