Mathematics, Statistics, and Computer Science **@ UIC**

Algebraic Geometry Seminar

Interpolation of Projective Varieties

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Abstract: In this talk, we discuss interpolation of projective varieties through points. It is well known that one can find a rational normal curve in \mathbb{P}^n through n + 3 general points. More recently, it was shown that one can always find nonspecial curves through the expected number of general points. We consider the generalization of this question to varieties of all dimensions and explain why rational normal scrolls satisfy interpolation. We'll also discuss joint work with Anand Patel on interpolation for del Pezzo surfaces and present several interesting open interpolation problems. We'll place particular emphasis on explaining the standard techniques used to solve interpolation: deformation theory, specialization, degeneration, and association.

Monday, February 15 at 2:00 PM in SEO 1227