

Title: Points in the Projective Plane

Abstract: In this talk, I will discuss the geometry of the Hilbert scheme of n points in the projective plane, which is a smooth compactification of the configuration space of n points. I will focus on the question: What is the most special codimension one position that n points can lie in? For example, three points are typically not collinear, but in codimension one they can be collinear. This simple question will lead us to a tour of some fun mathematics ranging from moduli spaces of stable sheaves on the plane to fractal curves and palindromic numbers. This talk is based on joint work with Jack Huizenga and Matthew Woolf.