

Department of Mathematics and Statistics Colloquium

Motivating intersection theory with counting problems

Will Traves, US Naval Academy

Abstract: Intersection theory is one of the more abstract branches of algebraic geometry, itself a pretty abstract area of mathematical research. In this talk I'll use some simple-to-state counting problems to explain why we might want a way to compute intersections and then give a concrete introduction to intersection theory itself. Along the way we'll meet a lot of great geometric objects, like projective space and Grassmanians - two objects that can be understood with basic linear algebra. My goal in the talk will be to provide a glimpse of a very interesting area of mathematical research through accessible examples.

**Monday, April 27 at 3:45 in Roop 103
refreshments at 3:30**