"Syzygy, inexorable, pancreatic, phantasmagoria — anyone who can use those four words in one sentence will never have to do manual labor."

— W.P. Kinsella

## The Trivial Notions Seminar Proudly Announces

The Syzygy

## A talk by Eric Riedl

## Abstract

Syzygies are relations between generators of an ideal. Aside from being useful in Scrabble, they are also useful in understanding the geometry of varieties. They are closely related to the Hilbert function, and they help characterize what varieties a particular variety lies on. In this talk, I will define syzygies and minimal resolutions, then focus on an example, talking about computing syzygies of seven points in  $\mathbb{P}^3$ .

Thursday October 20<sup>th</sup>, at 11:30 am Science Center 309