Graduate Student Seminar

UNIVERSITY OF NOTRE DAME

Department of Mathematics

Speaker: Michael Perlman
University of Notre Dame

Monday, November 23, 2015
4:00 PM
129 Hayes-Healy Hall

Title: Minimal Free Resolutions and Hilbert's Syzygy Theorem

Abstract:

The idea to associate a free resolution to a finitely generated module was introduced by Hilbert in the late nineteenth century. Minimal free resolutions are invariants of modules that encode algebraic and geometric information. This talk in meant to be an introduction to the theory of minimal resolutions through the computation of several examples. We will prove the Hilbert Syzygy Theorem and provide a geometric application.