

ALGEBRAIC GEOMETRY AND COMMUTATIVE ALGEBRA SEMINAR

Speaker: Erika Ordog
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Date: Wednesday, February 5, 2020

Time: 3:00 PM

Location: 258 Hurley Hall

Lecture Title:

Minimal resolutions of monomial ideals

Abstract

The problem of finding minimal free resolutions of monomial ideals in polynomial rings has been central to commutative algebra ever since Kaplansky raised the problem in the 1960s and his student, Diana Taylor, produced the first general construction in 1966. The ultimate goal along these lines is a construction of free resolutions that is universal -- that is, valid for arbitrary monomial ideals -- canonical, combinatorial, and minimal. This talk describes a solution to the problem valid in characteristic 0 and almost all positive characteristics.