Department of Mathematics and Computer Science

Monday, February 24, 2014, 4:00

SPECIAL COLLOQUIUM TALK

Speaker: David Cook II

University of Notre Dame

Old Main 2231

Enumerations Deciding the Weak Lefschetz Property

Abstract:

The weak Lefschetz property is a property which quotient rings may enjoy. The presence of the weak Lefschetz property forces the quotient ring to have many nice properties, such as a strictly unimodal Hilbert function. We describe an approach for studying the weak Lefschetz property for monomial ideals in three variables by way of enumerating lozenge tilings of certain planar regions. Using this, we classify the presence of the weak Lefschetz property for monomial ideals of type two.

SNACKS IN FACULTY LOUNGE AT 3:30 PM.
EVERYONE WELCOME (EVEN IF YOU ARE UNABLE TO ATTEND THE TALK)