Colloquium

University of Notre Dame
ACMS & Department of Mathematics

Speaker: Frank Sottile

Texas A&M



Will give a lecture entitled
Galois Groups in Enumerative Geometry and Applications

Date: Thursday, March 5, 2026
Time: 3:45 PM
Location: 117 Hayes-Healy Center

Departmental Tea: A tea will precede the event at 3:15 pm in 117 Hayes-Healy Center.

Zoom URL:

Abstract:

In 1870 Jordan explained how Galois theory can be applied to problems from enumerative geometry, with the group encoding intrinsic structure of the problem. Earlier Hermite showed the equivalence of Galois groups with geometric monodromy groups, and in 1979 Harris initiated the modern study of Galois group of enumerative problems. He posited that a Galois group should be 'as large a possible' in that it will be the largest group preserving internal symmetry in the geometric problem. I will describe this background and discuss some work of many to compute, study, and use Galois groups of geometric problems, including those that arise in applications of algebraic geometry.

Frank Sottile - Texas A&M