TEXAS STATE UNIVERSITY

The rising STAR *of Texas*

Discrete Mathematics Seminar

Time: Friday, November 15, 2019, 2:15-3:15 PM
Room: 330 Derrick Hall
Title: Compositions of Schubert Problems
Speaker: Dr. Frank Sottile, Department of Mathematics, Texas A&M University

Abstract:

A composition of Schubert problems is a construction that takes two Schubert problems on possibly different Grassmannians and gives a Schubert problem on a larger Grassmannian whose number of solutions is the product of the numbers of solutions of the original problems. This generalizes a construction that was discovered while classifying Schubert problems with imprimitive Galois groups.

I will explain this construction and the product formula, which has both an algebraic and a bijective proof. I will also discuss how this construction is related to Galois groups of Schubert problems. This is joint work with Li Ying and Robert Williams.