

Front Range Algebra, Geometry and Number Theory Seminar

FRAGMENT

Quartic curves and their bitangents

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We present a computational study of plane curves of degree four, with primary focus on writing their defining polynomials as sums of squares and as symmetric determinants. Number theorists will enjoy the appearance of the Weyl group E_7 as the Galois group of the 28 bitangents. Based on joint work with Daniel Plaumann and Cynthia Vinzant, this lecture spans a bridge from 19th century algebra to 21st century optimization.

Friday December 2

1-2 PM

MATH 350