

Stanford Algebraic Geometry

— Seminar —

PETERSEN 2-PLANE ARRANGEMENTS AND SURFACES WITH MANY 7-SECANTS

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Abstract

Arrangements of 2-planes in \mathbb{P}^4 are of inherent combinatorial interest. In addition, they may lead to interesting surfaces in \mathbb{P}^4 via liaison. Such considerations lead us to the investigation of the moduli of locally Cohen-Macaulay 2-plane arrangements whose incidence structure is represented by the Petersen graph. We describe the geometry of the linked surfaces of degree 15, including an exceptionally large number of 7-secants. This is joint work with Hirotachi Abo (U. Idaho) and Chris Peterson (Colorado State).

Friday, October 20

3:15 p.m.

Room 383-N

<http://math.stanford.edu/ag/s0607/>