

ALGEBRAIC GEOMETRY AND COMMUTATIVE ALGEBRA SEMINAR

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Date: Thursday, November 14, 2019

Time: 3:00 PM

Location: 258 Hurley Hall

Lecture Title:
Generalized Smoothability

Abstract

In this talk I will introduce a class of singularities that generalizes the class of smoothable singularities: these are all singularities that admit deformations to deficient conormal (dc) singularities. I will discuss how this new class arises from problems in differential equisingularity and how it relates to the vanishing of the local volume of a line bundle. Using Thom's transversality, Whitney stratifications and Lagrangian geometry I will show that all smoothable, codimension 2 Cohen-Macaulay, codimension 3 Gorenstein, almost complete intersections, and more generally determinantal and Pfaffian singularities admit deformations to dc singularities.