

Stanford Algebraic Geometry Seminar

G -HILB AND THE TORIC HILBERT SCHEME

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Abstract:

This talk will discuss two sets of schemes which were introduced separately but are tightly connected. G -Hilb was introduced by Nakamura as a candidate for a crepant resolution for the singularity \mathbb{C}^n/G where G is a finite subgroup of $GL(n)$. The toric Hilbert scheme, introduced by Peeva and Stillman, parameterizes all ideals which have the same multigraded Hilbert function as the toric ideal. It turns out that when G is abelian G -Hilb can be regarded as a special case of the toric Hilbert scheme. I will explain this viewpoint, and discuss a set of parallel results about the two schemes.

Friday, November 8

3:30 pm

Room 383-N

<http://math.stanford.edu/~vakil/seminar.html>