

Hilbert schemes: Extended monads and Representation.

Abdelmoubine Amar Henni

UNICAMP

Abstract:

We give a linear algebraic description of the Hilbert scheme of points on the affine space of dimension n which naturally extends Nakajima's representation of the Hilbert scheme of points on the plane. We also introduce extended monads and perfect extended monads in order to generalize the monadic description of ideal sheaves of 0-dimensional subschemes of projective spaces, and give a proof of representing the Hilbert functor of points.