
MIKE STILLMAN, Cornell University

Generic initial ideals and the Hilbert scheme of locally Cohen-Macaulay space curves

We consider the stratification of the Hilbert scheme of equidimensional space curves (possibly with multiple structure) by reverse lexicographic generic initial ideals. Building on work of Floystad and Liebling, we give partial criteria for whether a Borel fixed monomial ideal can be such a generic initial ideal, and also describe software in Macaulay2 which helps to map such Hilbert schemes. This represents joint work with Kristine Jones.