Mathematics, Statistics, and Computer Science   **@ UIC**

Commutative Algebra Seminar

Diagonal cartier algebras and symbolic powers

Daniel Smolkin (Utah)

Abstract: An important question in commutative algebra is the relationship between ordinary and symbolic powers of ideals. Indeed, Huneke–Katz–Validashti ask: for a domain R, does there always exist a number h so that the hn-th symbolic power of every prime ideal P is contained in its n-th ordinary power? I will present recent progress on answering this question, joint with Janet Page and Kevin Tucker, that was done by studying p-inverse linear maps compatible with higher diagonal embeddings. Time permitting, we will investigate how the set of such maps reflects the singularities of R.

Monday, October 22 at 3:00 PM in 612 SEO