F-pure thresholds of quasi-homogeneous polynomials

Emily Witt
University of Minnesota

The F-pure threshold is an invariant in characteristic p>0 measuring how ``bad" a singularity is; it is analogous to the log canonical threshold in characteristic zero. We describe the general form of an F-pure threshold of a homogeneous polynomial with isolated singularity in a polynomial ring endowed with a possibly non-standard grading. This is joint work with Daniel Hernández, Luis Núñez-Betancourt, and Wenliang Zhang.