1067-13-392   **Daniel Jesús Hernández*** (`dhernan@umich.edu`). *F-pure thresholds of hypersurfaces over fields of positive characteristic.*

To any polynomial over a perfect field of positive characteristic (or more generally to any principal ideal in an F-finite ring), one may associate an invariant called the F-pure threshold. This invariant, defined using the Frobenius morphism on the ambient ring, can be thought of as a positive characteristic analog of the well-known log canonical threshold in characteristic zero. In this talk, we will present some formulas for F-pure thresholds, and discuss the relationship between F-pure thresholds and log canonical thresholds. We also point out how these results are related to the longstanding open problem regarding the equivalence of (dense) F-pure type and log canonical singularities for hypersurfaces in complex affine space. (Received August 31, 2010)