Log canonical thresholds and birational rigidity

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Abstract

Let X be a smooth projective variety and Y be a closed subscheme of X. An important invariant for the singularities of the pair (X, Y) is the log canonical threshold. We'll discuss some of the properties of this invariant. In particular we'll compare log canonical thresholds with the classical Samuel multiplicities. We'll also describe some applications of these results to birational rigidity of hypersurfaces of degree n in P^n.