Jinjia Li* (j01i0027@louisville.edu), Department of Mathematics, University of Louisville, Louisville, KY 40245. Some observations on F-threshold. Preliminary report.

Let R be a commutative Noetherian ring in characteristic p. For a pair of ideals a, I of R such that $a \subseteq \sqrt{I}$, one can define the F-threshold as the limit of $\max\{t|a^t \not\subseteq I^{[p^e]}\}/p^e$ as $e \to \infty$, provided the limit exists. We will discuss some new properties of this invariant, and its connections with other numerical invariants in Commutative Algebra. (Received August 21, 2015)