Daniel J Hernandez* (dhernan@math.utah.edu) and Pedro Teixeira. Syzygy gap fractals and F-thresholds.

Using properties of syzygy gap fractals, we derive some structural results for F-pure thresholds (and, more generally, F-thresholds) of homogeneous polynomials in two variables over a field of positive characteristic. As a corollary, we are able to answer a question of Schwede regarding the denominator of an F-pure threshold when it differs from its “expected” value (i.e., the value of the log canonical threshold) in this special setting. (Received September 03, 2014)