1126-13-297 Uwe Nagel (uwe.nagel@uky.edu) and Bill Trok* (william.trok@uky.edu). Regularity Bounds on Fat Point Ideals.

Given an ideal I corresponding to fat points in $k[x_0,...,x_n]$, there is an integer r(I), past where the Hilbert Function is equal to the degree of I. (That is $H_I(t) = \deg(I)$ for $t \ge r(I)$.) In this we establish a conjecture of Fatabbi, Lorenzini, and Trung placing an upper bound, known as the Segre Bound, on r(I). A key is results on partitions of Matroids into independent sets. (Received January 16, 2017)