1138-13-95 Rankeya Datta* (rankeya@umich.edu), Ann Arbor, MI 48103. Uniform approximation of valuation ideals in prime characteristic.

Following their influential work on symbolic powers of ideals, Ein, Lazarsfeld and Smith used asymptotic multiplier ideals in another ingenious way to prove uniform estimates for valuation ideals associated to a real-valued Abhyankar valuation centered on a smooth variety of characteristic 0. In this talk, we will explain how to prove an analogue of their result for smooth varieties over perfect ground fields of prime characteristic, even in the absence of resolution of singularities and deep vanishing theorems. (Received February 02, 2018)