1100-13-245 **Susan Marie Cooper*** (s.cooper@cmich.edu), Department of Mathematics, Central Michigan University, Mt. Pleasant, MI 48859. *Complete and Partial Intersections.* Preliminary report.

Hilbert functions of reduced point sets in projective space are well-understood. However, we have yet to characterize Hilbert functions of fat points. In this talk we will compare Hilbert functions of fat points supported inside grid complete intersections to Hilbert functions of reduced point sets called partial intersections. As an application, we will bound the minimum Hamming distance of a family of linear codes. (Received February 09, 2014)