

Meeting: 1003, Atlanta, Georgia, SS 20A, AMS Special Session on Commutative Algebra, I

1003-13-822 **Jinjia Li*** (jinjiali@math.uiuc.edu), Department of Mathematics, 1409 W. Green St., Urbana, IL 61801. *Failure of a length condition for nonnegativity of intersection multiplicity and characterizations for modules with finite projective dimension over complete intersections.*

I will talk about two results from my recent work. The first one is a counterexample to a length condition appeared in a recent paper of S.P. Dutta, which is a sufficient condition for a special case of nonnegativity of intersection multiplicity over complete intersections in positive characteristic. The second one is a characterization for finitely generated modules with finite projective (or injective) dimension over complete intersections in positive characteristic, which is parallel to a result of L. Avramov and C. Miller. (Received September 30, 2004)