ED GREEN, Virginia Tech When are selfinjective algebras Koszul?

Let A be a (finite dimensional) graded connected selfinjective algebra. In this talk, I will discuss sufficient conditions on A that imply that A is Koszul. We present two different results. The first result restricts the Poincaré series and requires the existence of a copoint module. The second result is homological in nature and requires the existence of a system of modules (copoint, coline, etc) that are interrelated by short exact sequences.