

1114-13-306

**Gabriel E Sosa\*** ([gsosa@amherst.edu](mailto:gsosa@amherst.edu)). *Rees and multi-Rees algebras of principal strongly stable Ideals.*

Strongly stable ideals coincide with Borel fixed monomial ideals (0-Borel) in characteristic 0. A principal strongly stable ideal is a strongly stable ideal whose set of minimal monomial generators can be obtained by applying Borel moves to a distinguished monomial. We prove that the Rees and multi-Rees algebras of certain principal strongly stable ideals are Koszul, Cohen-Macaulay normal domains and we present Grobner basis for their defining ideals using a combination of a sorting technique due to Sturmfels and an ordering technique. (Received August 31, 2015)