

1161-13-195

Ayah Almousa* (aka66@cornell.edu) and **Keller VandeBogert**. *Resolutions of initial ideals of some determinantal facet ideals.*

We consider the class of determinantal facet ideals which form a Gröbner basis with respect to a diagonal term order. We show that the multigraded Betti numbers of initial ideals of such determinantal facet ideals are always either 0 or 1, and that the standard graded Betti numbers of these determinantal facet ideals and their initial ideals coincide when generators of the ideal come from maximal minors of a generic $n \times m$ matrix with $n > 2$. We give explicit differentials for the linear strand of initial ideals of determinantal facet ideals which form a Gröbner basis with respect to a diagonal term order. (Received August 17, 2020)