1171-13-182 **Kyle Logan Maddox*** (maddox@ku.edu) and **Vaibhav Pandey**. *Homological properties of pinched Veronese rings.* Preliminary report.

In joint work with Vaibhav Pandey, we present an analysis of various properties for pinched Veroense rings, which are formed by removing an algebra generator from a Veroense subring of a polynomial ring. We exploit the tools of local cohomology and the combinatorics of the underlying affine semigroups, especially in the case of two indeterminants. Ornella Greco and Ivan Martino studied the Cohen-Macaulayness of these rings by calculating the betti numbers of these rings using the reduced homology of squarefree divisor complexes.

Pinched Veronese rings present an interesting range of homological properties largely dependant on the which algebra generator of the Veronese subring is pinched out. We demonstrate that this class of rings are rarely normal, but can be Goresntein or Cohen-Macaulay in many cases. When the characteristic of the underlying field is positive, we show that all pinched Veronese rings in two variables are weakly F-nilpotent, an F-singularity type of recent interest. (Received August 10, 2021)