## 1126-13-299 **Rebecca R.G.\*** (rirebhuh@syr.edu) and **Geoffrey D. Dietz**. Directed families of big Cohen-Macaulay algebras in equal characteristic.

Previously, Geoffrey Dietz proved that big Cohen-Macaulay algebras in characteristic p > 0 form a directed family. In joint work with Geoffrey Dietz, we extend these results to the equal characteristic 0 case using work of Schoutens on reduction to characteristic p via ultraproducts. When combined with results on closure operations by Geoffrey Dietz and the speaker, this work has implications for the use of big Cohen-Macaulay algebras in classifying singularities. (Received January 16, 2017)