

1075-13-41

Jen-Chieh Hsiao and **Karl Schwede*** (schwede@math.psu.edu), Department of Mathematics, Penn State University, University Park, PA 16803, and **Wenliang Zhang**. *Cartier modules on toric varieties*.

In a recent paper, Blickle and Bockle, introduced the study of ideals of a ring fixed by a given p^{-e} -linear map. Unfortunately, there was a lack of examples. In this paper, we give a complete characterization of these ideals in the toric setting. Furthermore, we even generalize the question to triples, including a monomial ideal to a formal rational power.

By using a correspondence between p^{-e} -linear maps and divisors, we also find a multiplier-ideal-like characterization of these ideals utilizing a resolution of singularities. (Received August 25, 2011)