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**Janet Page\*** (jpage8@uic.edu). *Some Examples of Frobenius Complexity.*

Central to the study of singularities in characteristic  $p$  is the Frobenius morphism and its splittings. Given a commutative ring  $R$  of positive characteristic, the total Cartier algebra is the ring of all potential Frobenius splittings of  $R$  (or all  $p^{-e}$  linear maps on  $R$ ), and it has been studied in various contexts in its relation to singularities. This ring need not be finitely generated over  $R$ , which led Enescu and Yao to define Frobenius complexity as a measure of its non-finite generation. In their examples, Frobenius complexity is not always even rational, but its limit as  $p \rightarrow \infty$  is an integer. Few other examples have been computed. In this talk, I will discuss some results on the limit Frobenius complexity of a certain class of toric rings called Hibi rings. (Received July 18, 2017)