Florian Enescu* (fenescu@gsu.edu), Department of Mathematics and Statistics, 25 Park Place, Georgia State Univ, Atlanta, GA 30303, and Yongwei Yao. Graded rings of rational twist in prime characteristic. Preliminary report.

We study the generating function associated to complexity sequence of the twisted construction of a \( N \)-graded ring. We regard this as an object reflecting the properties of the ring and its grading and perform a detailed analysis of the case of the polynomial ring with general \( \mathbb{N} \)-grading. Applications to the Frobenius complexity of determinantal rings are provided. (Received August 16, 2020)