Florian Enescu* (fenescu@gsu.edu), Department of Mathematics and Statistics, 25 Park Place, Georgia State University, Atlanta, GA 30303. Generating functions and the twisted construction for graded rings. Preliminary report.

Prompted by the definition for the Frobenius complexity of a local ring of positive characteristic, we examine generating functions that can be associated to the twisted construction of a graded ring of positive characteristic. We will examine ideas related to these functions and detail some open questions that appear naturally in this context. This work is joint with Yongwei Yao. (Received July 30, 2018)