

## Cox-Gorenstein Algebras

RODRIGO GONDIM, Universidade Federal Rural de Pernambuco

We study  $G$ -graded Artinian algebras having Poincaré duality and their Lefschetz properties. We prove the equivalence between the toric setup and the  $G$ -graded one. We prove a Hessian criterion in the  $G$ -graded setup. We provide an application to toric geometry. We propose a question about Jordan types.

(Joint with U. Bruzzo, R. Holanda, W. Montoya.)