

Symmetric decomposition of the associated graded algebra of a Gorenstein Artinian algebra

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A *Gorenstein sequence* here is an integer sequence that occurs as the Hilbert function of a (not necessarily graded) Gorenstein Artinian algebra A . It is the sum of symmetric non-negative sequences arising from the symmetric subquotient decomposition of the associated graded algebra of A . We will report on recent results on the existence of Gorenstein sequences and on the structure of their symmetric decomposition.