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Hilbert Functions of Artinian Gorenstein Ideals Stabilized by the Symmetric Group.

We consider graded artinian Gorenstein quotients of the polynomial ring which are also representations of the symmetric group and whose socle is invariant. We will determine their graded characters and Hilbert functions by relating these algebras to subrepresentations of the regular representation of the symmetric group. These turn out to be closely related to Kostka-Foulkes polynomials. (Received August 13, 2014)