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Stefan O Tohaneanu*, Department of Mathematical Sciences, The University of Cincinnati, P
O Box 210025, Cincinnati, OH 45221-0025. *Gorenstein Evaluation Codes*.

Let Γ be a set of n points in \mathbb{P}^m . The evaluation code $C(\Gamma)_a$ is the linear code of length n obtained by evaluating the homogeneous polynomials of degree a at all the points of Γ . In this talk we present a lower bound for the minimum distance of $C(\Gamma)_a$ for the case when Γ is an arithmetically Gorenstein nondegenerate reduced zero-dimensional scheme in \mathbb{P}^m . The bound is expressed in terms of the socle degree of the Artinian reduction of the ideal of Γ , and it generalizes the result of Gold-Little-Schenck when Γ is a reduced complete intersection zero-dimensional scheme. (Received January 01, 2010)