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Luigi Ferraro* (ferrar1@wfu.edu). *Modules of infinite regularity over graded commutative rings.*

It is proved that if a graded, commutative algebra R over a field k is not Koszul then, denoting by \mathfrak{m} the maximal homogeneous ideal, the nonzero modules of the form $\mathfrak{m}M$ have infinite Castelnuovo-Mumford regularity. It is also proved that over complete intersections which are not Koszul, a nonzero direct summand of a syzygy of k has infinite regularity. We also relate the vanishing of the graded deviations of R to having a nonzero direct summand of a syzygy of k of finite regularity. (Received July 22, 2017)