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Janet Striuli* (jstriuli@fairfield.edu), Fairfield, CT, and **Hamidreza Rahmati** and **Claudia Miller**. *A property of the Koszul homology module over Gorenstein rings*. Preliminary report.

Let R be a local Gorenstein ring of dimension d . Let I be an ideal minimally generated by l elements and of grade g . By a result of Golod, if all the non-vanishing Koszul homology $H_j(I), j = 0, \dots, l - g$ are Cohen-Macaulay, then $Ext^g(H_i(I), R) \cong H_{l-g-i}(I)$.

In this talk we will present a duality that holds for a general ideal I of R , of which Golod's result is a corollary. This is joint work with Hamidreza Rahmati and Claudia Miller. (Received January 18, 2011)