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Luigi Ferraro* (lferraro@ttu.edu), **Desiree L. Martin** and **Frank W. Moore**. *The Taylor Resolution over a Skew Polynomial Ring*.

Let I be a monomial ideal in the polynomial ring $R = k[x_1, \dots, x_n]$ over a field k . In her thesis, Taylor introduced a complex which provides a multi-graded free resolution for R/I as an R -module. Later, Gameda provided a differential graded structure on Taylor's complex. We generalize each of these results to monomial ideals in a skew polynomial ring. (Received July 31, 2020)