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Eric L. Clark* (eric.clark@uky.edu), 715 Patterson Office Tower, Department of Mathematics, University of Kentucky, Lexington, KY 40506-0027, and **Richard Ehrenborg**. *The excedance algebra*. Preliminary report.

Motivated by a result from Ehrenborg and Steingrímsson on the excedance set permutation statistic, let the Excedance Algebra be given by the ring $\mathbb{Z}\langle a, b \rangle$ of polynomials in the non-commuting variables a and b subject to the relation $ba - ab - a - b = 0$. Thus, any ab -word u can be rewritten as a sum of monomials of the form $a^i b^j$. In this talk, we will study the coefficients of these monomials which have many interesting interpretations, including Genocchi numbers, Gandhi polynomials, and elementary symmetric functions. (Received August 30, 2010)