962-13-255   **Carolyn A Yackel*** (`cyackel@indiana.edu`), Rawles Hall, Department of Mathematics, Bloomington, IN 47405-5701. *Koszul Homology and Frobenius Powers of Quotient Ideals.* Preliminary report.

Given a finitely generated module, M, over a Noetherian ring, R, and a fixed sequence of elements of R, $\underline{x} = x_1, \ldots, x_n$, let $I = (f_1, \ldots, f_k)$ be an ideal such that $\mathrm{H}_i(\underline{x}; M/I)$ has finite length. We discuss the relationship between this length and the length of $\mathrm{H}_i(\underline{x}; M/I_N)$, where $I_N = (f_1^N, \ldots, f_k^N)$ is a generalized Frobenius power of I. (Received September 04, 2000)