1047-05-35 **T Abualrub**, **A Ghrayeb**, **N Aydin*** (`aydinn@kenyon.edu`) and **I Siap**. *On the Construction of Skew Quasi-Cyclic Codes.* Preliminary report.

Cyclic codes have an important place in algebraic coding theory. There have been many generalizations of cyclic codes. In this work we study a recent generalization of cyclic codes known as skew QC codes. This set of codes is constructed using a non-commutative ring called the skew polynomial ring $F[x; \theta]$. Skew QC codes are left submodules of the ring $R_s^l = (F[x; \theta]/(x^s - 1))^l$. Our search in this class of codes resulted in the construction of several new codes with Hamming distances exceeding the Hamming distances of the previously best known linear codes with comparable parameters. (Received December 09, 2008)