

1112-12-137

Neville Fogarty* (neville.fogarty@uky.edu), Department of Mathematics, 715 Patterson Office Tower, University of Kentucky, Lexington, KY 40506, and **Heide Gluesing-Luerssen**. *A Circulant Approach to Skew-Constacyclic Codes.*

We introduce a type of skew-generalized circulant matrices that captures the structure of a skew-polynomial ring $\mathbb{F}[x; \theta]$ modulo the left ideal generated by a polynomial of the form $x^n - a$. This allows us to develop an approach to skew-constacyclic codes based on skew-generalized circulants. We show that for the code-relevant case, the transpose of a skew-generalized circulant is also a skew-generalized circulant. This recovers the well-known result that the dual of a skew-constacyclic code is also a skew-constacyclic code. (Received August 03, 2015)