1077-12-1073   **Edgar Martìnez-Moro**, **Hakan Özadam**, **Ferruh Özbudak** and **Steve Szabo***
(`steve.szabo@eku.edu`). *A Class of Multidimensional Repeated-root Cyclic Codes.*

We study a particular class of multidimensional repeated-root cyclic codes over a finite field. We show that these codes are products of one dimensional cyclic codes whose lengths are powers of p. We obtain the Hamming distance for such codes. Using the Hasse derrivative, we obtain a parity check matrix as well. Finally, we genaralize the so-called weight-retaining property to multivariables. (Received September 16, 2011)

1