

Meeting: 1003, Atlanta, Georgia, SIAMMINI 3, SIAM Minisymposium on Error-Correcting Codes

1003-94-699 **Jon-Lark Kim*** (jlkim@math.unl.edu), Department of Mathematics, 203 Avery Hall, P.O.Box 880130, University of Nebraska - Lincoln, Lincoln, NE 68588-0130. *Algebraic or combinatorial constructions of LDPC codes.*

In this talk, we discuss algebraic or combinatorial constructions of LDPC codes developed by several authors. We briefly go over the well-known constructions of LDPC codes based on groups, finite geometries, permutation matrices, and regular bipartite graphs. We describe what other constructions have been suggested so far and conclude with some open problems. (Received September 27, 2004)