

1011-94-288

Matt Koetz* (mkoetz1@naz.edu), Nazareth College, Department of Mathematics, 4245 East Avenue, Rochester, NY 14618. *Graph-Theoretic Constructions of LDPC Codes*.

In this talk we present constructions of LDPC codes using so-called "graph splittings" of bipartite graphs with large girth and large expansion factor, properties known to improve the performance of LDPC codes with iterative decoding methods. (Received August 29, 2005)