

1074-94-295

**Nigel Boston\*** ([boston@math.wisc.edu](mailto:boston@math.wisc.edu)), Department of Mathematics, University of Wisconsin, Madison, WI 53706. *Pseudocodewords and pseudoweights.*

The performance of iterative decoding algorithms may be affected by the existence of pseudocodewords of low pseudoweight. After reviewing this situation, we will give some new techniques that show the nonexistence of such pseudocodewords for certain important codes, in both the trellis and Tanner graph cases. Some of this depends on work by David Conti. (Received August 23, 2011)