

1038-94-300

**Daniel J. Costello\*** ([costello.2@nd.edu](mailto:costello.2@nd.edu)), Dept. of Elec. Engr., 275 Fitzpatrick Hall, Univ. of Notre Dame, Notre Dame, IN 46556. *Recent Results on Asymptotically Good Code Ensembles.*

In this paper, we review two recent results on asymptotically good code ensembles. First, we consider multiple serially concatenated codes and show that the minimum distance grows linearly with block length as the block length tends to infinity for several low-complexity ensembles of serially concatenated codes. Second, we consider low density parity check (LDPC) convolutional codes based on protographs and show that the free distance grows linearly with constraint length as the constraint length tends to infinity for several regular and irregular ensembles based on protographs. We also show that the distance growth rates of the LDPC convolutional codes exceeds those of comparable ensembles of LDPC block codes. (Received February 12, 2008)