1046-94-2012   **Abigail G. Mitchell*** (`abigail.mitchell@math.unizh.ch`), Institute for Mathematics, University of Zuerich, Winterthurerstr. 190, CH-8057 Zuerich, Switzerland. *On right-regular graphs for cascaded LDPC codes.*

Luby, Shokrollahi and others have shown that random irregular graphs with particular degree sequences can be cascaded together to produce codes which achieve capacity on the binary erasure channel. Of these various degree sequences, the most strongly capacity-achieving is in fact a right-regular sequence. Recently we have introduced an explicit construction of such right-regular graphs; in this talk we examine the performance of this construction, particularly with regard to pseudocodeword weight. This is joint work with Joachim Rosenthal, also at the University of Zürich. (Received September 16, 2008)