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**Christine A. Kelley\*** ([ckelley2@math.unl.edu](mailto:ckelley2@math.unl.edu)), Department of Mathematics, 203 Avery Hall, Lincoln, NE 68506. *Distance bounds for generalized LDPC codes using graph connectivity.*

Generalized LDPC codes form the basis of several important code constructions including expander codes and asymptotically good codes. In this talk, we present lower bounds on distance parameters for two classes of generalized LDPC codes. These bounds rely on the connectivity of the underlying Tanner graph and are extensions of Tanner's bit and parity-oriented bounds to the generalized LDPC code case. These bounds complement existing distance bounds that require additional knowledge of the expansion properties of the graph. (Received January 26, 2010)