1053-57-252          **Heather A. Dye\*** (`hadye@mckendree.edu`), McKendree University, 701 College Rd, Lebanon, IL
62254. *Bounds on Mosaic Knots.* Preliminary report.

Mosaic knot theory is a version of knot theory, wherein knots are laid out on a grid. A N-mosaic knot is constructed by laying out an $N \times N$ matrix of 11 possible tiles. These tiles contain 1-tangles, 2-tangles, or are blank. The mosaic number of a knot is the smallest $n$ for which the knot can be laid out on an $n \times n$ matrix. In this talk, we present bounds on the mosaic number and the crossing number. (Received September 07, 2009)