1024-51-113 Ken Stephenson* (kens@math.utk.edu), Dept of Mathematics, University of Tennessee, Knoxville, TN 37996-1300. Spontaneous geometry via circle packing. Preliminary report.

Spontaneous geometry refers informally to the global geometry which emerges when local geometric rules are applied to some otherwise abstract combinatorial situation. For this talk, the geometry is provided by circle packing. Examples in "conformal" tiling, point distributions, and Riemann surfaces will illustrate the potential utility of the emergent geometry. (Received January 04, 2007)