

1067-91-310

Kate Burgers*, Department of Mathematics, Harvey Mudd College, 301 Platt Boulevard, Claremont, CA 91711, and **Julianne Upton**, Department of Mathematics, Linfield College, 900 SE Baker Street, McMinnville, OR 97128. *Generating Artificial Social Networks*.

A method for generating undirected connected graphs using a modification of the traditional preferential attachment algorithm is presented. This new Mutual Neighbor Preferential Attachment (MNPA) method produces scale free networks with more realistic clustering coefficients than the traditional Barabási–Albert (BA) model. The MNPA method can be tuned to produce a network of a desired size and target clustering coefficient and thus it is a valuable new tool for Monte Carlo experiments with artificial social networks. (Received August 19, 2010)