1056-05-558Tao Jiang, Bill Kinnersley, Kevin G. Milans* (milans@math.uiuc.edu) and Douglas B.
West. Degree Ramsey Numbers of Graphs. Preliminary report.

A graph H arrows a graph G if every 2-edge-coloring of H contains a monochromatic copy of G. The degree Ramsey number of G is the minimum k such that some graph with maximum degree k arrows G. Burr, Erdős, and Lovász found the degree Ramsey number of stars and complete graphs. We establish the degree Ramsey number exactly for double stars and C_4 , the cycle on four vertices. We prove that the degree Ramsey number of the cycle C_n is at most 108 when nis even and at most 3890 in general. We present a family of graphs in which the degree Ramsey number of G is bounded by a function of the maximum degree of G and ask which graph families have this property. This is joint work with Tao Jiang, Bill Kinnersley, and Douglas B. West. (Received September 12, 2009)