1056-05-558 Tao 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 $n$ is 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)

