

**SOME RAMSEY-TURÁN TYPE PROBLEMS AND
RELATED QUESTIONS**

R. H. Schelp*

rschelp@memphis.edu

ABSTRACT

In this paper the following Ramsey-Turán type problem is one of several addressed. For which graphs G does there exist a constant $0 < c < 1$ such that when H is a graph of order the Ramsey number $r(G)$ with $\delta(H) > c|H|$, then any 2-edge coloring of H contains a monochromatic copy of G ? Specific results, conjectures, and questions with suggested values for c are considered when G is an odd cycle, path, or tree of limited maximum degree. Another variant is to 2-edge color a replacement for the graph $K_{r(G)}$ by a balanced multipartite graph of approximately the same order with the same consequence, a monochromatic G .

*Department of Mathematical Sciences, University of Memphis, Memphis, TN 38152