

Zbl 797.05056

Clark, Lane; Entringer, Roger C.; Erdős, Paul; Sun, Huicheng; Székely, László

Extremal problems for the Bondy-Chvátal closure of a graph. (In English)

Rees, Rolf S. (ed.), **Graphs, matrices, and designs.** Festschrift in honor of Norman J. Pullman. New York: Marcel Dekker, Inc. Lect. Notes Pure Appl. Math. 139, 73-83 (1993). [ISBN 0-8247-8790-0/pbk]

Authors' abstract: Let $f(n)$ denote the maximum diameter of all graphs of order n whose Bondy-Chvátal n -closure is complete. It is shown that $3.2 \log n - 9 \leq f(n) \leq 8.3 \log n + 16$. Let $h(n)$ denote the maximum ratio of the number of edges in the n -closure of a graph of order n to the number of edges in the graph. It is shown that $h(n) < 4$; this bound is sharp.

B. Andrásfai (Budapest)

Classification:

05C35 Extremal problems (graph theory)

Keywords:

extremal problems; Bondy-Chvátal closure; maximum diameter; bound