

Zbl 684.05043

Erdős, Paul; Hell, P.; Winkler, P.

Bandwidth versus bandsize. (In English)

Graph theory in memory of G. A. Dirac, Pap. Meet., Sandbjerg/Den. 1985, Ann. Discrete Math. 41, 117-129 (1989).

[For the entire collection see Zbl 656.00008.]

After introducing the notions numbering of a graph, width of a numbering, bandwidth and bandsize of a graph, the three authors prove that for fixed integer k , a graph G with n vertices and bandsize k has bandwidth only $O(n^{1-1/k})$. Moreover, they can show that this bound is best possible. They finish their investigations by comparing the bandwidth and bandsize of random graphs, by finding a lower bound for the bandsize, and by giving a long list of references concerning this topic.

R. Bodendiek

Classification:

05C99 Graph theory

05C80 Random graphs

Keywords:

bandwidth; bandsize; random graphs