

**Shi, Ronghua**

**Graph decomposition with constraint on the minimum degree.** (English) Zbl 0625.05028  
Kexue Tongbao, Foreign Lang. Ed. 30, 1143-1146 (1985).

In [Graph decomposition with constraints on the connectivity and minimum degree, J. Graph Theory 7, 165-167 (1983; [Zbl 0515.05045](#))] the reviewer demonstrated the existence of a function  $g(s,t)$  such that every graph of minimum degree at least  $g(s,t)$  has two disjoint nonempty subgraphs which together cover all vertices of the graph and have minimum degree at least  $s$  and  $t$ , respectively. The main result of the present paper is the equality  $g(s,t) \leq s+2t-3$  for  $t \geq 4$ . This was also proved by *P. Hajnal* [Combinatorica 3, 95-99 (1983; [Zbl 0529.05030](#))].

Reviewer: [C.Thomassen](#)

**MSC:**

[05C35](#) Extremal problems in graph theory

**Keywords:**

Graph decomposition; connectivity; minimum degree