

Zbl 231.05110

Erdős, Pál

On the graph-theorem of Pál Turán. (In Hungarian)

Mat. Lapok 21 (1970), 249-251 (1971). [0025-519X]

Let G_n be a graph of n vertices, x_1, \dots, x_n . Assume $v(x_1) \geq v(x_2) \geq \dots \geq v(x_n)$ where $v(x)$ is the valency of the vertex x . Assume that G_n does not contain a complete subgraph of r vertices. The author proves that there is a graph G'_n having chromatic number $r - 1$ for which $v(y_i) \geq v(x_i)$, $i = 1, \dots, n$ (y_1, \dots, y_n are the vertices of G'_n). The method is essentially identical with that of *B. Andrásfai* [Publ. Math. Inst. Hung. Acad. Sci., Ser. A 7, 193-196 (1962; Zbl 114.40001)].

Classification:

05C15 Chromatic theory of graphs and maps