Mader, W.
Subdivisions of a graph of maximal degree $n + 1$ in graphs of average degree $n + \epsilon$ and large girth. (English) Zbl 0981.05091

In the paper it is proved that for every integer $n \geq 2$ and every $\epsilon > 0$, there is a least positive integer $t(n, \epsilon)$ such that for every finite graph of average degree at least $n + \epsilon$ and of girth at least $t(n, \epsilon)$ contains a subdivision of the complete graph on $n + 2$ vertices. The values of $t(2, \epsilon)$ are determined for every $\epsilon > 0$.

Reviewer: M.Knor (Bratislava)

MSC:
05C83 Graph minors
05C35 Extremal problems in graph theory

Keywords:
average degree; girth; series-parallel graph; subdivision; subgraph

Full Text: DOI