

Cycle minors and subdivisions of wheels

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Abstract

In this talk two results will be presented. The first is an extension of a result of Dirac which says that any set of n vertices of an n -connected graph lies in a cycle. We prove that if V' is a set of at most $2n$ vertices in an n -connected graph G , then G has, as a minor, a cycle using all of the vertices of V' . The second result says that if G is an $n + 1$ -connected graph with maximum vertex degree Δ , then G contains a subgraph that is a subdivision of W_{2n} if and only if $\Delta \geq 2n$.