

论文

A NEW GENERALIZATION OF ORE'S THEOREM INVOLVING NEIGHBORHOOD UNIONS

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摘要 Let G be a 2-connected simple graph of order n . In this paper we prove the following generalization of Ore's theorem: If G is a 2-connected graph such that $|N(u) \cup N(v)| + |N(u) \cup N(w)| \geq n$ for every triple (u, v, w) , where $\{u, v, w\}$ is an independent set, then either G is hamiltonian, or G is the Petersen graph, or G belongs to one of the three families of exceptional graphs of connectivity 2. Our result generalizes three recent theorems: The first one is obtained by Tian[1], the second one by Broersma, Heurel and Veldma.[2] and the third one by Flandrin, Jung and Li[3].

关键词 [Hamiltonian, neighborhood unions](#)

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