Hamiltonicity of edge-chromatic critical graphs

刘慧清 湖北大学

Given a graph G, denote by Δ and χ' the maximum degree and the chromatic index of G, respectively. A simple graph G is called edge- Δ -critical if $\chi'(G) = \Delta + 1$ and $\chi'(H) \leq \Delta$ for every proper subgraph H of G. We proved that every edge chromatic critical graph of order n with maximum degree at least $\frac{2n}{3} + 12$ is Hamiltonian.