

Scattering Number and Hamilton-Connectivity of Interval Graphs

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We prove that for all $k \leq -1$ an interval graph is $-(k+1)$ -Hamilton-connected if and only if its scattering number is at most k . This complements a previously known fact that an interval graph has a nonnegative scattering number if and only if it contains a Hamilton cycle, as well as a characterization of interval graphs with positive scattering numbers in terms of the minimum size of a path cover.