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EXTREMAL UNICYCLIC GRAPHS WITH MINIMAL DISTANCE SPECTRAL RADIUS[1]

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Abstract

The distance spectral radius $\rho(G)$ of a graph G is the largest eigenvalue of the distance matrix $D(G)$. Let $\mathscr{U}(n,m)$ be the class of unicyclic graphs of order n with given matching number m ($m \neq 3$). In this paper, we determine the extremal unicyclic graph which has minimal distance spectral radius in $\mathscr{U}(n,m) \setminus C_n$.

Keywords: distance matrix, distance spectral radius, unicyclic graph, matching.

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