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# Maximum spectral radius of graphs with given connectivity and minimum degree

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Shiu, Chan and Chang [On the spectral radius of graphs with connectivity at most  $k$ , J. Math. Chem., 46 (2009), 340-346] studied the spectral radius of graphs of order  $n$  with  $\kappa(G) \leq k$  and showed that among those graphs, the maximum spectral radius is obtained uniquely at  $K_{k^{n-1}}$ , which is the graph obtained by joining  $k$  edges from  $k$  vertices of  $K_{n-1}$  to an isolated vertex. In this paper, we study the spectral radius of graphs of order  $n$  with  $\kappa(G) \leq k$  and minimum degree  $\delta(G) \geq k$ . We show that among those graphs, the maximum spectral radius is obtained uniquely at  $K_{k+(K_{\delta-k+1} \cup K_{n-\delta-1})}$ .

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