

Brualdi, Richard A.; Solheid, Ernie S.

On the spectral radius of connected graphs. (English) Zbl 0603.05028

Publ. Inst. Math., Nouv. Sér. 39(53), 45-54 (1986).

The spectral radius of a graph is the largest eigenvalue of its adjacency matrix. The authors determine connected graphs with n vertices and e edges with maximum spectral radius when $e = n + s$ ($0 \leq s \leq 5$) and n sufficiently large. These graphs consist of pendant edges attached at a vertex of maximal degree of G_s where G_s in K_3 , $K_4 - e$, K_4 for $s = 0, 1, 2$ and $\overline{K_s \cup 2K_1}$ for $s = 3, 4, 5$.

Reviewer: [D.Cvetkovic](#)

MSC:

[05C50](#) Graphs and linear algebra (matrices, eigenvalues, etc.)

[05C35](#) Extremal problems in graph theory

Cited in **51** Documents

Keywords:

[sepctral radius](#)

Full Text: [EuDML](#)