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**Shahla Nasserarsr\*** ([nasserarsrs@brandonu.ca](mailto:nasserarsrs@brandonu.ca)), Department of Mathematics, and Computer Science, Brandon, MB R7A 6A9, Canada. *Spectrum of the weighted adjacency matrices of a graph.*

Let  $S(G)$  be the set of all real symmetric matrices such that their off-diagonal entries are nonzero if and only if the corresponding vertices in the graph  $G$  are connected by an edge. In this talk, we will focus on the eigenvalues of these matrices. In particular, we are interested in  $q(G)$ , the minimum number of distinct eigenvalues of a matrix in  $S(G)$ . We will survey some results about the parameter  $q(G)$ . (Received January 27, 2019)