1145-15-2352   **Nancy Matar*** (`matar1n@cmich.edu`), Department of Mathematics, Central Michigan University, Mount Pleasant, MI 48859, and **Sivaram Narayan**. *On Signed Graphs Whose Minimum semidefinite Rank Is Equal To Two.*

For a simple graph G, the minimum rank among all symmetric positive semidefinite matrices associated to G by their zero-nonzero pattern is called the minimum semidefinite rank of G. The patterns $(+, -, 0)$ of real symmetric positive semidefinite matrices are used to study the minimum semidefinite rank of signed graphs (G, f), where f is a function that associates to every edge in G a sign from the set $\{+, -\}$. In this talk, a characterization of the signed graphs with minimum semidefinite rank equal to two will be presented. (Received September 25, 2018)