Speaker: Dr. Abdollah Khodkar (UWG)
Title: Signed edge domination numbers of complete tripartite graphs: Part II

Abstract:

The closed neighborhood $N_G[e]$ of an edge $e$ in a graph $G$ is the set consisting of $e$ and of all edges having an end-vertex in common with $e$. Let $f$ be a function on $E(G)$, the edge set of $G$, into the set $\{-1, 1\}$. If $\sum_{x \in N[e]} f(x) \geq 1$ for each edge $e \in E(G)$, then $f$ is called a signed edge dominating function of $G$. The signed edge domination number of $G$ is the minimum weight of a signed edge dominating function of $G$. In this talk, we present the signed edge domination number of the complete tripartite graph $K_{m,n,p}$, where $1 \leq m \leq n$ and $p \geq m + n$. This completes the search for the signed edge domination numbers of the complete tripartite graphs.