

DISCRETE MATHEMATICS SEMINAR
CENTER FOR APPLIED MATHEMATICS AND SCIENCE
DEPARTMENT OF MATHEMATICS
UNIVERSITY OF WEST GEORGIA

1:15 - 2:05 PM, Friday, February 10, 2017

BOYD 306

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 $\sum_{x \in N_G[e]} f(x) \geq 1$ 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.