

Inessa Epstein

Title of Talk: On two classes of graphs associated with zero divisor semigroups

Abstract:

To each commutative zero divisor semigroup S , we associate a simple graph $G(S)$. The vertices of the graph are the nonzero elements of S and there is an edge between two vertices a, b if and only if $ab = 0$. We examine the relationship between the semigroup theoretic properties and the graph theoretic properties of $G(S)$. In particular, we will present results pertaining to properties of semigroups associated with the class complete r -partite graphs and determine which graphs in the class of triangulated planar graphs are graphs of semigroups.