

1077-VJ-1695      **Daniel P. Biebighauser\*** (biebigha@cord.edu). *The Firefighter Problem for Directed Grids.*

Given a graph  $G$ , a fire breaks out at one or more vertices of  $G$ . Then we are able to place defenders on other vertices of  $G$  that are not currently burning. After this, the fire spreads to all undefended neighbors of burning vertices. This process continues until the fire can no longer spread.

We investigate this problem for directed rectangular and triangular grids. This is joint work with Michael Dyrud, Lise Holte, Nicole Rutt, and Ryan Wagner. (Received September 20, 2011)