

1086-VN-816 **Daniel P Biebighauser*** (biebigha@cord.edu), Concordia College, Moorhead, MN 56562.
Moveable Firefighters in the Firefighter Problem.

In the Firefighter Problem introduced by Hartnell in 1995, we consider strategies for defending against the spread of a fire in a graph. One of the assumptions in the original problem is that the firefighters remain stationary throughout this process. In this talk, we consider a variation where we allow the firefighters to move. We present an integer program for this variation, and prove a containment theorem for the lattice $\mathbb{Z} \times \mathbb{Z}$. This is joint work with students Lise Holte and Ryan Wagner. (Received September 13, 2012)