

## **Reconstruction of Graphs from Dominating Sets**

Drew J. Lipman\*, Hypergiant - Space Age Solutions

Since Kelly and Ulam published the reconstruction conjecture, there have been many results related to reconstructing the graph from information derived from the graph. This information has included all vertex-deleted subgraphs, and edge-deleted subgraphs. In this talk we will discuss reconstruction of labeled graphs from from the graph's dominating sets, and will present a characterization of what can be reconstructed for graphs with girth at least 5.

Keywords: Domination, Reconstruction, Girth