

1125-VU-1726      **Safia Chettih\***, safia@reed.edu. *Topology of Non- $k$ -Equal Configurations on Graphs.*

Configuration spaces of  $n$  points on a graph, where no two points are equal, have homology that is well-known in the unordered case, while they elude a general combinatorial description. Recently, there has been new interest in configurations of  $n$  points where no  $k$  points are equal, otherwise known as non- $k$ -equal configurations. In this talk, we will present new results which give a discretized model for non- $k$ -equal configuration spaces on graphs, and explain the implications for the combinatorial and geometric structures interrelating configurations on graphs. (Received September 19, 2016)