1145-VP-2250 Mitch Phillipson*, mphilli2@stedwards.edu. Non-Crossing Matchings on Words with Restricted Bonding Conditions.

Let G be a graph and w be a word on the vertex set of G. We consider all non-crossing matchings on w where each arc in the matching is an edge in G. Additionally, we define an operation to transform on matching to another, called a move. The move graph of a word is the directed graph of all non-crossing matchings with edges given by the moves. In this talk we work to classify graphs based on their possible move graphs. We give a sufficient condition when two graphs are equivalent and detail several open problems in the area. (Received September 25, 2018)