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Julianne Vega* (julianne.vega@uky.edu). *k*-matching sequences of simplicial complexes.

The homotopy type of $M_1(G)$ the matching complex for a graph G has been studied for paths, cycles, and trees. In this talk we will generalize to k -matching complexes, denoted $M_k(G)$ and consider the sequence $(M_1(G), M_2(G), \dots, M_n(G))$ up to homotopy for perfect caterpillar graphs. (Received September 09, 2019)