1171-05-192 **Kyle Murphy*** (kyle.murphy@dsu.edu) and **J.D. Nir**. Paths of Length Three are K_{r+1} -Turán Good.

The generalized Turán Problem is to determine the maximal number of copies of a graph T that can exist in an F-free graph on n vertices. Recently, Palmer and Gerbner defined the term F-Turán good to describe a graph H which is unique maximized by the Turán graph for all sufficiently large F-free graphs. They showed that the path on two edges, P_3 is K_{r+1} -Turán good for all $r \ge 3$, but they conjecture that this should hold for all P_{ℓ} . In this talk I will discuss joint work with J.D. Nir in which we prove that P_4 is K_{r+1} -Turán Good for $r \ge 3$. (Received August 10, 2021)