Michael Young* (myoung@iastate.edu), Ames, IA 50011. A conjecture on power domination for hypergraphs. Preliminary report.

Chang and Roussel studied a generalization of power domination on hypergraphs and conjectured an upper bound for the minimum $k$-power domination number in an $r$-uniform hypergraph. In this talk, we discuss the generalization, prove the conjecture for $2 \leq r \leq 4$, and provide a counterexample to the general conjecture. (Received July 16, 2019)