1145-05-2463 Anna C. Truman\* (trumanac1@gcc.edu), Grace C. Shook and Caleb T. Scutt. Number Sequences for Truncated and Bitruncated Cross-Polytopes.

Polytope numbers are sequences of nonnegative integers constructed from the geometry of a polytope. Truncation is a geometric process that cuts each vertex of a polytope along adjacent edges until one-third of each edge remains. Building on prior research and geometric processes presented by Dr. H.K. Kim, we find formulae which generate the polytope numbers for truncated and bitruncated cross-polytopes in any dimension. In addition, we explore higher truncation of cross-polytopes to introduce ideas for further research. (Received September 25, 2018)