Wendy Finbow-Singh*, wendy.finbow-singh@smu.ca. Low Dimensional Neighbourly Simplicial Polytopes.

Amongst the $d$-polytopes with $v$ vertices, the neighbourly polytopes have the greatest number of facets. This maximum property has prompted researchers to compose lists of them. In this talk, we will discuss an algorithm for generating the list of simplicial neighbourly $d$-polytopes with $v$ vertices, for a given dimension $d$ and number of vertices, $v$. (Received January 20, 2015)