1002-52-31 **Wendy A Finbow-Singh*** (`wfinbow@eastlink.ca`), PO Box 136, 4-391 Ellershouse Rd, Ellershouse, NS B0N 1L0, Canada. *Simplicial Neighbourly 5-Polytopes with Nine Vertices.*

Among the d-polytopes with v vertices, the neighbourly polytopes have the greatest number of facets. This maximum property of neighbourly polytopes has prompted researchers to compose lists of them. In this talk, we will discuss the simplicial, neighbourly 5-polytopes with nine vertices. We show that there are at least one hundred, twenty-six of them. We discuss the connection between the neighbourly 4-polytopes with eight vertices, the neighbourly 5-polytopes with nine vertices, and the neighbourly 6-polytopes with ten vertices. (Received July 14, 2004)