

1007-14-153

Jim Carrell* (carrell@math.ubc.ca), Department of Mathematics, University of British Columbia, Vancouver, Vancouver, B.C. V6T 1Z2, Canada. *Singularities of Schubert Varieties, Tangent Cones and Bruhat Graphs.*

This is joint work with Jochen Kuttler. Let G be a semi-simple algebraic group over \mathbb{C} , and let X denote a Schubert variety in the flag variety G/B . By a result of Dale Peterson, the Bruhat graph associated to X determines the singular locus of X if G is of type ADE . We will describe a generalization of Peterson's result which gives a non-recursive algorithm for finding the singular locus of X for any G in terms of its Bruhat graph. The extra information required is a knowledge of the length of an edge and the angle between edges. (Received February 18, 2005)