## 1031-05-37Alexander T Yong\* (ayong@math.umn.edu), 127 Vincent Hall, 206 Church Street SE,<br/>Minneapolis, MN , and Hugh Thomas. Schubert combinatorics.

The topic of Schubert varieties of homogeneous spaces G/P is at the interface between algebraic geometry, Lie theory and combinatorics. I'll focus on the topic of Schubert calculus: counting points in intersections of Schubert varieties. A goal has been combinatorial rules for these computations. I'll explain the *carton rule* which manifests basic symmetries of the numbers for the Grassmannian case (or equivalently, tensor product multiplicities of irreducible representations of  $SL_n(\mathbb{C})$ ) this version also has the advantage of generalizing to (co)minuscule G/P and (conjecturally) other contexts. (Received July 30, 2007)