1026-14-82   **Alexander Yong*** (`ayong@math.umn.edu`), Math Dept, University of Minnesota, 127 Vincent Hall, 206 Church Street SE, Minneapolis, MN 55455, and **Hugh Thomas** (`hugh@math.unb.ca`), Dept. of mathematics and statistics, University of New Brunswick, Fredericton, NB E3B 5A3, Canada. *Cominuscule Schubert calculus and tableau combinatorics.*

I will discuss a root system uniform, concise combinatorial rule for Schubert calculus of *minuscule* and *cominuscule* flag manifolds G/P. (The latter are also known as *compact Hermitian symmetric spaces*.) We connect this geometry to the work of [Proctor'04] in poset combinatorics, thereby generalizing [Schützenberger'77]'s *jeu de taquin* formulation of the Littlewood-Richardson rule for computing intersection numbers of Grassmannian Schubert varieties.

The proof uses *cominuscule recursions*, a general technique relating Schubert numbers for different Lie types. I will also discuss *cominuscule dual equivalence*, a generalization of a concept due to [Haiman'92]. We use this to provide an independent proof of Proctor's results needed in our context, as well as to extend prominent tableau combinatorics such as [Fomin'88]'s *growth diagrams* and [Schützenberger'63]'s *evacuation involution.*

This talk is based on math.AG/0608276 and math.CO/0701215. (Received February 15, 2007)