1021-05-55 **Alexander Yong*** (ayong@math.umn.edu), Math Dept., 127 Vincent Hall, 206 Church Street, Minneapolis, MN , and **Hugh Thomas** (hugh@math.unb.ca), Tilley Hall 418, University of New Brunswick, Fredericton, NB. *A combinatorial rule for (co)minuscule Schubert calculus.*

We prove 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 poset combinatorics of [Proctor '04], thereby giving a generalization of the [Schtzenberger '77] jeu de taquin formulation of the Littlewood-Richardson rule that computes the intersection numbers of Grassmannian Schubert varieties. Our proof introduces *cominuscule recursions*, a general technique to relate the numbers for different Lie types.

I will also briefly discuss connections of the rule to (geometric) representation theory, specifically to Kostant's study of Lie algebra cohomology, and separately, the geometric Satake correspondence of Ginzburg, Mirković-Vilonen et al.

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