

FLAGS Seminar

Organizer(s): Damien Mondragon and George Melvin

Friday, 12.10-1pm, 939 Evans

Nov. 8 **Allen Knutson**, Cornell University

Restricting Equivariant Classes to Fixed Points

Each Schubert variety in a flag manifold defines not only a cohomology class, but an equivariant cohomology class. Since the restriction to fixed points is injective on equivariant cohomology, we can in principle compute the product structure once we have a formula for these restrictions.

I'll introduce Bott-Samelson manifolds and use them to give a topological derivation of the Andersen-Jantzen-Soergel/Billey formula for these restrictions. Then I'll explain (without a complete proof) a derivation within algebraic geometry.

On $GL(n)/B$, there is an alternate approach using double Schubert polynomials. I'll explain Fulton's trick that makes this a special case of the above, inside $GL(2n)/B$.

More information can be found at <http://math.berkeley.edu/~gmelvin/flags/flagsf13.html>