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Dave Anderson* (dandersn@math.washington.edu) and **Linda Chen**. *Equivariant quantum Schubert polynomials*.

Just as the Schur functions represent cohomology classes in the Grassmannian, the Schubert polynomials represent classes in the flag variety. The last two decades have seen generalizations to analogues for equivariant cohomology and quantum cohomology. In this talk, I'll present joint work with Linda Chen which provides a common generalization of both theories: the "equivariant quantum Schubert polynomials" are polynomials in three sets of variables which represent Schubert classes in equivariant quantum cohomology, and specialize to all the previous versions. Our methods use the geometry of the Quot scheme, and open the way to further applications of the rich combinatorial structure of this space. (Received December 12, 2011)