

Vexillary signed permutations and essential sets for classical-type Schubert varieties

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The Schubert polynomials of Lascoux-Schutzenberger represent the (equivariant) cohomology classes of Schubert varieties in the type A flag variety, and possess a host of wonderful combinatorial properties. One such property is the existence of a determinantal formula for those associated to "vexillary" permutations. The analogous property for other classical types, found in recent joint work with William Fulton, involves a notion of "vexillary" for signed permutations. In this talk, I'll describe the combinatorics of vexillary signed permutations, relating them to pattern-avoidance criteria of Billey and T.K. Lam, as well as the general-type essential sets of Reiner, Woo, and Yong.