# MSRI–Evans Talk

Monday, 4:10–5:00pm, 10 Evans

Mar. 16    **William Fulton**, University of Michigan
*Equivariant Cohomology of Combinatorial Varieties*

Among the many varieties studied by algebraic geometers, a few have a rich combinatorial structure that leads us to hope we can work out any geometric or enumerative problem in concrete terms. This study goes back at least a century and a half, when Schubert calculus arose to count subspaces of a vector space meeting arrays of other subspaces in given dimensions; in modern terms these are problems of computing in the cohomology of Grassmannians. Even for Grassmannians and flag varieties, however, we are very far from a thorough understanding of these problems. This talk will describe some of the recent approaches, especially with the use of equivariant cohomology, which takes advantage of the groups that act on these varieties.