KONSTANZE RIETSCH, King's College, London (UK), and Waterloo Quantum cohomology of G/P and the Peterson variety

Let G be a reductive linear algebraic group. The Peterson variety is a projective subvariety of the Langlands dual flag variety which, by a remarkable theorem of Dale Peterson's, has strata that are isomorphic to  $\operatorname{Spec}(qH^*(G/P))$  for the varying parabolic subgroups P in G. We give a new construction of these strata shedding some (vague) light on the why and wherefore of Peterson's theorem.