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"Poisson geometry and the Schubert calculus"

Abstract: The theory of quantum groups gives rise to various Poisson structures on semi-simple Lie groups and their homogeneous spaces. In this talk, we make connections between these Poisson structures and a series of theorems of Kostant in the 60's on Lie algebra cohomology. In particular, we interpret Kostant's harmonic forms on the flag manifold G/B in terms of moment maps and Liouville volume forms coming from the Bruhat Poisson structure on the flag manifold.