DAHA action on equivariant quantum cohomologies of T^*G/B

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Given a complex reductive group G and a G-representation N, there is an associated Coulomb branch algebra defined by Braverman–Finkelberg–Nakajima. We show that these Coulomb branch algebras can be described as the largest subcomodules of the equivariant BM-homology of the affine Grassmannian on which certain shift operators admit non-equivariant limits.

As an application, we give a geometric construction of a (degenerate) DAHA action on the equivariant quantum cohomology of T^*(G/P) via stable envelopes.