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Quantum Giambelli formulas for symplectic Grassmannians.

The symplectic Grassmannian $X = \text{IG}(m, 2n)$ is the set of m -dimensional isotropic subspaces in a symplectic vector space of dimension $2n$. In joint work with Kresch and Tamvakis, we have proved a Pieri formula for multiplying with the special Schubert classes that generate the (quantum) cohomology ring of X . I will speak about a Giambelli formula that expresses any quantum Schubert class as a polynomial in the special classes. This formula is new also in the ordinary cohomology of X , and interpolates between the Jacobi-Trudi determinant formula known from Grassmannians of type A , and the Pfaffian formula for Schubert classes on the Lagrangian Grassmannian $\text{IG}(n, 2n)$. (Received February 10, 2009)