Soichi Okada* (okada@math.nagoya-u.ac.jp). Positivity for symplectic Q-functions.

Symplectic Q-functions are a family of Weyl group invariant Laurent polynomials, which are obtained by putting $t = -1$ in the Hall–Littlewood polynomials associated to the root system of type $C$. They are a type $C$ analogue of Schur Q-functions originally introduced by Schur in his study of projective representations of symmetric groups. In this talk, we establish several Pfaffian formulas, a tableau description (Hamel–King conjecture) and a Pieri-type rule for symplectic Q-functions. Also we discuss some conjectures including the positivity conjecture of structure constants. (Received September 03, 2019)