Hook-content Formulae for Symplectic and Orthogonal Tableaux

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Abstract. By considering the specialisation $s_\lambda(1, q, q^2, \ldots, q^{n-1})$ of the Schur function, Stanley was able to describe a formula for the number of semistandard Young tableaux of shape $\lambda$ in terms of the contents and hook lengths of the boxes in the Young diagram. Using specialisations of symplectic and orthogonal Schur functions, we derive corresponding formulae, first given by El Samra and King, for the number of semistandard symplectic and orthogonal $\lambda$-tableaux.

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