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Prism Tableaux and Alternating Sign Matrices

A prism tableau is an overlay of semistandard tableaux. In joint work with A. Yong, prism tableaux were used to provide a formula for Schubert polynomials. This expression directly generalizes the tableau rule for Schur polynomials. We study fillings of more general prism shapes. The resulting polynomials are multiplicity free sums of Schubert polynomials. Each prism shape has an associated alternating sign matrix. We use this connection to give a prism formula for the multidegree of an alternating sign matrix variety.