The Prism tableau model for Schubert polynomials

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Abstract

The Schubert polynomials lift the Schur basis of symmetric polynomials into a basis for Z[x1; x2; : : :]. We
suggest the prism tableau model for these polynomials. A novel aspect of this alternative to earlier results is that it
directly invokes semistandard tableaux; it does so as part of a colored tableau amalgam. In the Grassmannian case, a
prism tableau with colors ignored is a semistandard Young tableau. Our arguments are developed from the Grobner
geometry of matrix Schubert varieties.

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