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*Littlewood–Richardson coefficients for Macdonald polynomials*

Macdonald polynomials are a generalization of spherical functions of real and  $p$ -adic groups, and they are closely related to the representation theory of the double affine Hecke algebra. The type  $A$  Macdonald polynomials are a common generalization of Schur polynomials, Jack polynomials and Hall–Littlewood polynomials, which correspond to the general linear group over various fields. In this talk we describe some new results for these polynomials, including a recursive formula for the Littlewood–Richardson coefficients for the expansion of the product of two Macdonald polynomials.