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Sankaran Viswanath* (svis@math.iisc.ernet.in), Department of Mathematics, Indian Institute of Science, Bangalore, 560012, India. *On Constant term identities of Cherednik-Macdonald-Mehta type for $\widehat{sl_2\mathbb{C}}$.*

We consider Hall-Littlewood polynomials associated to the simplest affine Lie algebra $\widehat{sl_2\mathbb{C}}$. Work of Macdonald and Fishel-Grojnowski-Teleman deal with levels 0 and 1, and allow us to explicitly compute the t-analogs of string functions in these cases.

We describe how to compute principal specializations of the Hall-Littlewood polynomials for certain other highest weights, of levels 2 and 4. These in turn allow us to give closed form expressions for the corresponding t-string functions, and further to derive higher-level analogs of Cherednik's constant term identities of Macdonald and Macdonald-Mehta type. (Received January 12, 2009)