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HALL-LITTLEWOOD POLYNOMIALS AS RANDOMISATIONS

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We express the Hall-Littlewood polynomials, up to a multiplicative factor, as expectations of Schur functions whose indexing partition is a coordinatewise randomisation of the original partition by a particular sequence of explicit correlated random variables. We also treat the case of the spin Hall-Littlewood polynomials by first writing them as randomisations of the Hall-Littlewood polynomials and generalise this framework to a class of symmetric functions that include the Jing and Milne polynomials.

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