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Jason Bandlow* (jbandlow@math.upenn.edu), Department of Mathematics, David Rittenhouse Laboratory, 209 South 33rd Street, Philadelphia, PA 19104-6395. *The expansion of Hall-Littlewood polynomials into dual Grothendieck polynomials*. Preliminary report.

A combinatorial expansion of the Hall-Littlewood polynomials into the Schur basis of symmetric functions was first given by Lascoux and Schützenberger, with their discovery of the charge statistic. A combinatorial expansion of stable Grassmannian Grothendieck polynomials into monomials was first given by Buch, using set-valued tableaux. The dual basis of the Grothendieck polynomials was given a combinatorial expansion into monomials by Lam and Pylyavsky using plane partitions. In this talk I will describe these combinatorial ideas and show how they can be extended and combined to give a nice expansion of Hall-Littlewood polynomials into the dual Grothendieck basis. (Received August 28, 2009)