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**Jennifer Morse** (morsej@math.drexel.edu), 3141 Chestnut Street, Philadelphia, PA 19104. *A new proof of the Pieri rule for the dual Grothendieck polynomials.*

The Robinson-Schensted-Knuth correspondence between bi-words and pairs of same shape Young tableaux has applications in various mathematical areas and in physics. A notable example is the proof of the Pieri rule which determines multiplication in the cohomology ring of Grassmannians. In the spirit of RSK, we provide a new proof of the Pieri rule for multiplying polynomials that are dual to the Grothendieck polynomials. (Received September 22, 2010)