1129-05-73 Sami Assaf and Dominic Searles* (dsearles@usc.edu), Department of Mathematics, 3620 S Vermont Ave KAP 104, Los Angeles, CA 90089. Kohnert tableaux and quasi-key polynomials.

We introduce the combinatorial model of Kohnert tableaux, based on the diagram model of A. Kohnert. We use Kohnert tableaux to introduce the quasi-key basis of the polynomial ring, which lifts the quasi-Schur polynomials of Haglund, Luoto, Mason and van Willigenburg. Key polynomials expand positively in quasi-key polynomials which in turn expand positively in fundamental slide polynomials. We give simple, positive combinatorial formulas for these expansions in terms of Kohnert tableaux, lifting the parallel expansions of a Schur polynomial into quasi-Schur polynomials into fundamental quasisymmetric polynomials. (Received March 02, 2017)