

1167-05-62

Jianping Pan* (jpgpan@ucdavis.edu), Department of Mathematics, One Shields Ave, Davis, CA 95616, and **Joseph Pappé, Wencin Poh** and **Anne Schilling**. *Uncrowding algorithm for hook-valued tableaux: Part II*.

Whereas set-valued tableaux are the combinatorial objects associated to stable Grothendieck polynomials, hook-valued tableaux are associated to stable canonical Grothendieck polynomials. In this paper, we define a novel uncrowding algorithm for hook-valued tableaux. The algorithm “uncrowds” the entries in the arm of the hooks and yields a set-valued tableau and a column-flagged increasing tableau. We prove that our uncrowding algorithm intertwines with crystal operators. An alternative uncrowding algorithm that “uncrowds” the entries in the leg instead of the arm of the hooks is also given. As an application of uncrowding, we obtain various expansions of the canonical Grothendieck polynomials. This is joint work with Joseph Pappé, Wencin Poh and Anne Schilling. (Received February 13, 2021)