1167-05-61 **Jianping Pan**, **Joseph Pappe**, **Wencin Poh** and **Anne Schilling*** (anne@math.ucdavis.edu).
Uncrowding algorithm for hook-valued tableaux: Part I.

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 Jianping Pan, Joseph Pappe, and Wencin Poh. (Received February 13, 2021)