1056-05-2141 **Qiang Wang*** (`xqwang@math.ucdavis.edu`), Mathematics Department, University of California, One Shield Ave, Davis, CA 95616, and **Steven Pon** (`spon@math.ucdavis.edu`), Mathematics Department, University of California, One Shield Ave, Davis, CA 95616. *Promotion acting on Standard Young Tableaux of staircase shape.* Preliminary report.

On the set of standard Young tableaux $SSTY(\lambda)$, there is a bijection called promotion first defined by Schützenberger. Rrendon Rhoades recently showed that for λ being rectangular shape, promotion acting on $SSYT(\lambda)$ exhibits the *cyclic sieving phenomenon* (CSP). As a result, the complete cycle structure of the action is recovered. In this paper, we report a partial solution to the problem where λ is the staircase shape, and conjecture the realization of CSP polynomial as a product of cyclotomic polynomials. (Received September 23, 2009)