1158-05-69   **Cara Monical**, **Oliver Pechenik*** (`pechenik@umich.edu`) and **Travis Scrimshaw**. *Crystal structures for symmetric Grothendieck polynomials.*

The symmetric Grothendieck polynomials representing Schubert classes in the K-theory of Grassmannians are generating functions for semistandard set-valued tableaux. We construct a type A crystal structure on these tableaux. Applications include a new combinatorial formula for decomposing symmetric Grothendieck polynomials into Schur polynomials. For rectangular shapes, we give a new interpretation of Lascoux polynomials (K-analogues of Demazure characters) by constructing a K-theoretic analogue of crystals with an appropriate analogue of a Demazure subcrystal. (Received February 20, 2020)