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**Cara P Monical\*** (cmonica2@illinois.edu), 1409 W. Green St, Urbana, IL 61801. *K-theoretic Demazure atoms and set-valued skyline diagrams*. Preliminary report.

Demazure characters and atoms are well-studied specializations of Macdonald polynomials with combinatorial descriptions in terms of semistandard skyline fillings. We study a “*K*-theoretic” generalization of these polynomials and give a conjectural description in terms of set-valued semistandard skyline fillings. We show that this combinatorial description provides a generalization of several known results of Demazure atoms, including a decomposition of the Grothendieck polynomial  $G_\lambda$ . (Received February 20, 2016)