CARA MONICAL, University of Illinois at Urbana-Champaign *Set-Valued Skyline Fillings*

Set-valued tableaux play an important role in combinatorial *K*-theory. Separately, semistandard skyline fillings are a combinatorial model for Demazure atoms and key polynomials. We unify these two concepts by defining a set-valued extension of semistandard skyline fillings and then give analogues of results of J. Haglund, K. Luoto, S. Mason, and S. van Willigenburg. Then in joint work with O. Pechenik and D. Searles, we show how these fillings can be used to define *K*-theoretic extensions of the quasikey polynomials of S. Assaf and D. Searles.