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Bruce Sagan, John Shareshian and Michelle L Wachs* (wachs@math.miami.edu),
Department of Mathematics, University of Miami, Coral Gables, FL 33124. *Eulerian
quasisymmetric functions and cyclic sieving.*

It is shown that a refined version of a q -analogue of the Eulerian numbers together with the action, by conjugation, of the subgroup of the symmetric group S_n generated by the n -cycle $(1, 2, \dots, n)$ on the set of permutations of fixed cycle type and fixed number of excedances provides an instance of the cyclic sieving phenomenon of Reiner, Stanton and White. The main tool is a class of symmetric functions recently introduced in work of two of the authors. (Received September 22, 2009)