1121-05-67 **Sergi Elizalde*** (sergi.elizalde@dartmouth.edu), Department of Mathematics, Dartmouth College, 6188 Kemeny Hall, Hanover, NH 03755, and **Yuval Roichman**. *Schur-positive grid classes.*

To each set of permutations one can associate a quasisymmetric function in a natural way, by adding the fundamental quasisymmetric functions indexed by the descent sets of the permutations in the set. A long-standing problem in algebraic combinatorics is to characterize sets of permutations whose associated quasisymmetric function is symmetric and Schur-positive.

After discussing some known examples of such Schur-positive sets, we give a general method to construct new Schur-positive sets and multisets of permutations. The method is based on the product operation, and on sets of pattern-avoiding permutations called geometric grid classes. (Received July 10, 2016)