1106-05-972 **Brendan Pawlowski*** (salmiak@math.washington.edu) and **Sara Billey**. *Permutation patterns and Stanley symmetric functions.*

Given a permutation w, Stanley defined a symmetric function F_w which encodes information about the reduced words of w, and showed that F_w is a single Schur function exactly when w avoids the pattern 2143. We generalize this statement, showing that the Schur expansion of F_w respects pattern containment in a certain sense, and that the number of Schur function terms is determined by pattern avoidance conditions on w. Our proofs use the *diagram Specht modules* introduced by James and Peel, which in this case are closely related to the Schubert modules of Kraśkiewicz and Pragacz. (Received September 09, 2014)