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**Brendon Rhoades\*** (bprhoades@math.ucsd.edu). *A skein action of the symmetric group on noncrossing partitions.*

We introduce a new action of the symmetric group  $S_n$  on the vector space spanned by noncrossing partitions of  $\{1, 2, \dots, n\}$ . The adjacent transpositions  $(i, i + 1)$  will act using a seemingly novel collection of skein relations which resolve crossings in set partitions. We apply our action to solve cyclic sieving questions of Reiner-Stanton-White and Pechenik. (Received February 06, 2016)