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**Shannon L Starr\*** (slstarr@uab.edu), UAB Department of Mathematics, Campbell Hall, 1300 University Boulevard, Birmingham, AL 35294-1170, and **Meg Walters**. *Fluctuations in the Mallows measure on permutations.*

We bound the fluctuations for the Mallows measures on the symmetric groups. For a number  $q > 0$  the probability of a permutation  $\pi$  is proportional to  $q^{l(\pi)}$  where  $l(\pi)$  is the "length" of  $\pi$ . With the scaling  $n$ -to-infinity with  $q = q_n$  such that  $n^*(1 - q_n)$  converges to a number  $\beta$ , we study the limit as well as the fluctuations in the form of a local central limit theorem. (Received December 26, 2014)