

## Abstract

The subject of this paper is the cycle structure of the random permutation  $\sigma$  of  $[N]$ , which is the product of  $k$  independent random cycles of maximal length  $N$ . We use the character-based Fourier transform to study the number of cycles of  $\sigma$  and also the distribution of the elements of the subset  $[\ell]$  among the cycles of  $\sigma$ .