

CENTRAL LIMIT THEOREMS FOR RANDOM MULTIPLICATIVE FUNCTIONS

KANNAN SOUNDARARAJAN (Stanford University)

ABSTRACT: We consider the behavior of random multiplicative functions when summed over subsets of the integers in $[1, N]$, and give several examples of sets where such sums satisfy a central limit theorem. In contrast, as we know from the work of Harper, the partial sums over all integers in $[1, N]$ does not satisfy a central limit theorem.

ELAZ 2022

Adam Mickiewicz University, Poznań, Poland
August 22–26, 2022