

Sambandham, M.; Renganathan, N.

On the number of real zeros of a random trigonometric polynomial: Coefficients with non-zero mean. (English) [Zbl 0632.60063](#)

J. Indian Math. Soc., New Ser. 45(1984), 193-203 (1981).

For the random trigonometric polynomial $\phi(\theta, t) = \sum_{n=1}^N g_n(t) \cos n\theta$ where $0 \leq t \leq 1$ and $g_n(t)$ are independent normal random variables with mean m ($\neq 0$) and variance ν^2 , we estimate the probable number of zeros in the interval $0 \leq \theta \leq 2\pi$.

MSC:

[60H99](#) Stochastic analysis

[60F05](#) Central limit and other weak theorems

Cited in **6** Documents

Keywords:

random trigonometric polynomial; number of zeros