LIPSCHITZ CONDITIONS FOR RANDOM PROCESSES FROM $L_p(\Omega)$ SPACES OF RANDOM VARIABLES

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Abstract. In this paper we study the Lipschitz continuity of random processes $X = (X(t), t \in \mathbb{T})$ from $L_p(\Omega)$ spaces, where $(\mathbb{T}, \rho)$ is some metric space, and provide estimates for the distribution of sample paths of such processes. Obtained results are used in Analysis in the study of the rate of approximation of functions by trigonometric polynomials.


Keywords and phrases: $L_p(\Omega)$ spaces, Lipschitz condition, moduli of continuity.

REFERENCES