

Statistical Convergence of the Szasz-Mirakjan-Kantorovich-Type Operators

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Abstract : The main aim of this article is to investigate the statistical convergence of the summation of integral type operators and to obtain the weighted statistical convergence. The rate of statistical convergence by means of modulus of continuity and function belonging to the Lipschitz class are also studied. We discuss the convergence of the defined operators by graphical representation and put a better rate of convergence than the Szasz-Mirakjan-Kantorovich operators. In the last section, we extend said operators into bivariate operators to study about the rate of convergence in sense of modulus of continuity and by means of Lipschitz class by using function of two variables.

Keywords : The Szasz-Mirakjan-Kantorovich operators, statistical convergence, modulus of continuity, Peeters K-functional, weighted modulus of continuity

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