# Statistical approximation properties of bivariate extension of q-Lupa-Stancu operators

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In this paper we introduce a bivariate generalization of the q-Lupa-Stancu operators. First, we estimate the moments for these operators, then we examine approximation properties of our new operator via Korovkin type theorem. We also establish approximation properties and rate of A-statistical convergence for these operators. Further, the error of approximation for these opperators is calculated by using modulus of contuinuity and Lipschitz-type functions. Finally, the convergence of the bivariate q-Lupa-Stancu operators for certain functions are illustrated graphically using Python programming language.