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Approximation with Rates by Multivariate Generalized Discrete Singular Operators.

Here we give the approximation properties with rates of multivariate generalized discrete versions of Picard, Gauss-Weierstrass, and Poisson-Cauchy singular operators over \mathbb{R} to \mathbb{N} , N greater equal 1. We treat both the unitary and non-unitary cases of the operators above. We derive quantitatively L_p convergence of these operators to the unit operator by involving the L_p higher modulus of smoothness of an L_p function. (Received June 05, 2015)