World Academy of Science, Engineering and Technology
International Journal of Mathematical and Computational Sciences
Vol:9, No:03, 2015

Degree of Approximation of Functions Conjugate to Periodic Functions Belonging to Lipschitz Classes by Product Matrix Means

Authors : Smita Sonker

Abstract : Various investigators have determined the degree of approximation of conjugate signals (functions) of functions belonging to different classes Lipα, Lip(α,p), Lip(ξ(t),p), W(Lr,ξ(t), (β ≥ 0)) by matrix summability means, lower triangular matrix operator, product means (i.e. (C,1)(E,1), (C,1)(E,q), (E,q)(C,1) (N,p,q)(E,1), and (E,q)(N,pn) of their conjugate trigonometric Fourier series. In this paper, we shall determine the degree of approximation of 2π-periodic function conjugate functions of f belonging to the function classes Lipα and W(Lr; ξ(t); (β ≥ 0)) by (C1.T) -means of their conjugate trigonometric Fourier series. On the other hand, we shall review above-mentioned work in the light of Lenski.

Keywords : signals, trigonometric fourier approximation, class W(L^r,\xi(t), conjugate fourier series
Conference Title : ICMMAC 2015 : International Conference on Mathematical Modeling, Analysis and Computation
Conference Location : London, United Kingdom
Conference Dates : March 14-15, 2015