

Operational properties of two integral transforms of fourier type and their convolutions

Giang B.T., van Mau N., Tuan N.M.

Department of Basic Science, Institute of Cryptography Science, 141 Chien Thang Str., Thanh Tri Dist., Hanoi, Viet Nam; Nguyen Van Mau and Nguyen Minh Tuan, Department of Mathematical Analysis, University of Hanoi, 334 Nguyen Trai Str., Hanoi, Viet Nam

Abstract: In this paper we present the operational properties of two integral transforms of Fourier type, provide the formulation of convolutions, and obtain eight new convolutions for those transforms. Moreover, we consider applications such as the construction of normed ring structures on $L_1()$, further applications to linear partial differential equations and an integral equation with a mixed Toeplitz-Hankel kernel. © 2009 Birkhäuser Verlag Basel/Switzerland.

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Correspondence Address: Mau, N.; Nguyen Van Mau and Nguyen Minh Tuan, Department of Mathematical Analysis, University of Hanoi, 334 Nguyen Trai Str., Hanoi, Viet Nam; email: maunv@vnu.edu.vn

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Authors with affiliations:

- Giang, B.T., Department of Basic Science, Institute of Cryptography Science, 141 Chien Thang Str., Thanh Tri Dist., Hanoi, Viet Nam
- van Mau, N., Nguyen Van Mau and Nguyen Minh Tuan, Department of Mathematical Analysis, University of Hanoi, 334 Nguyen Trai Str., Hanoi, Viet Nam
- Tuan, N.M., Nguyen Van Mau and Nguyen Minh Tuan, Department of Mathematical Analysis, University of Hanoi, 334 Nguyen Trai Str., Hanoi, Viet Nam

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