

A CONVOLUTION STRUCTURE FOR EIGEN FUNCTION TRANSFORM

S. R. VERMA

Department of Mathematics and Statistics, Faculty of Science, Gurukula Kangri Vishwavidyalaya, Haridwar, India

ABSTRACT

Translation and convolution associated with Eigenfunction transform, studied by Zemanian, are defined and certain boundedness and continuity results are obtained. Convolution of a distribution and a test function, and that of two distributions are defined and their properties are investigated.

KEYWORDS: Eigen Function Transform, Convolution, Distributions

AMS Subject Classification: Primary 44A35; Secondary 46F12