REPRESENTATION OF THE LIE ALGEBRA T_3 AND 2-VARIABLE 1-PARAMETER TRICOMI-BESSEL FUNCTIONS

Tadayoshi Takebayashi

Abstract

We give a representation of the 3-dimensional Lie algebra T_3 by using 2-variable 1-parameter Tricomi-Bessel functions defined by Dattoli et al. [G. Dattoli, M. Migliorati and H. M. Srivastava, Some families of generating functions for the Bessel and related functions, Georgian Math. J. 11(2) (2004), 219-228].