



REPRESENTATION OF THE LIE ALGEBRA  $T_3$   
AND HERMITE-TRICOMI FUNCTIONS

Tadayoshi Takebayashi

Received November 10, 2019

Abstract

Dattoli et al. [G. Dattoli, P. E. Ricci, I. Khomasuridze, On the derivation of new families of generating functions involving ordinary Bessel functions and Bessel-Hermite functions, Mathematical and Computer Modeling 46 (2007), 410-414] defined the Hermite-Tricomi function of  $m$ th order  $C_n^{(m)}(x, y)$ . Using them, we give a representation of the Lie algebra  $T_3$ .

**Keywords and phrases:** Lie algebra  $T_3$ , Hermite-Tricomi functions.

Pioneer Journal  
of Mathematics  
and Mathematical  
Sciences



Pioneer Scientific  
Publisher