



REPRESENTATION OF LIE ALGEBRA  $T_3$   
AND GENERALIZED BESSEL  
FUNCTIONS  $J_n^q(x, y, t)$

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**Abstract**

Dattoli et al. [G. Datt, A Torre, S. Lorenzutta, G. Maino and C. Chiccoli, Generalized Bessel functions within the group representation formalism, *Il Nuovo Cimento B* 111(2) (1996), 143-164] defined the generalized Bessel functions  $J_n^q(x, y, t)$ . Using them, we give a representation of the Lie algebra  $T_3$  [Willard Miller, Jr., *Lie theory and special functions*, Mathematics in Science and Engineering, Vol. 43, Academic Press, New York and London, 1968].

**Keywords and phrases:** Lie algebra  $T_3$ , generalized Bessel functions.

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