



REPRESENTATION OF THE LIE ALGEBRA K_5
AND HYBRID LAGUERRE-HERMITE
POLYNOMIALS

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Abstract

Dattoli et al. [G. Dattoli, S. Lorenzutta, A. M. Mancho and A. Torre, Generalized polynomials and associated operational identities, J. Comput. Appl. Math. 108(1-2) (1999), 209-218] (see also [Giuseppe Dattoli, Paolo E. Ricci and Clemente Cesarano, A note on Legendre polynomials, Int. J. Nonlinear Sci. Numer. Simul. 2(4) (2001), 365-370]) defined the hybrid Laguerre-Hermite polynomials ${}_2L_n(x, y)$. Using them, we give a representation of the Lie algebra K_5 .

Keywords and phrases: Lie algebra K_5 , hybrid Laguerre-Hermite polynomials.

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