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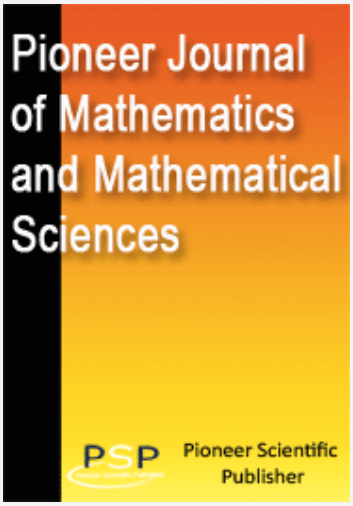

REPRESENTATION OF LIE ALGEBRA K_5 AND ASSOCIATED 2-VARIABLE HERMITE POLYNOMIALS $h_n^{(2)}(x, y; z, \tau)$

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Abstract

Dattoli et al. [G. Dattoli, A. Torre and M. Carpanese, Operational rules and arbitrary order Hermite generating functions, J. Math. Anal. 227(1) (1998), 98-111] defined the polynomials $h_n^{(2)}(x, y; z, \tau)$. We call them associated 2-variable Hermite polynomials, and using them, we give a representation of the Lie algebra K_5.

Keywords and phrases: Lie algebra K_5, associated 2-variable Hermite polynomials.