



REPRESENTATION OF LIE ALGEBRA  
 $\tilde{K}_5$  AND 2-VARIABLE HERMITE  
POLYNOMIALS  $h_{n,m}(x, y)$

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**Abstract**

In [G. Djordjević, On some properties of generalized Hermite polynomials, 1994], G. Djordjević considered the generalized Hermite polynomials  $h_{n,m}(x)$ . Similarly, we define 2-variable Hermite polynomials  $h_{n,m}(x, y)$ , and using them, we give a representation of the Lie algebra  $\tilde{K}_5$ .

**Keywords and phrases:** Lie algebra  $\tilde{K}_5$ , 2-variable Hermite polynomials  $h_{n,m}(x, y)$ .

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