



**REPRESENTATION OF THE LIE ALGEBRA  $G(0, 1)$   
AND THE POLYNOMIALS  $Z_{m,n}^{(\beta)}(x, y)$**

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**Abstract**

In [M. E. H. Ismail and J. Zeng, Two variable extensions of the Laguerre and disc polynomials, J. Math. Anal. Appl. 424(1) (2015), 289-303], M. E. H. Ismail and J. Zeng introduced new polynomials  $Z_{m,n}^{(\beta)}(x, y)$  as an extension of  $2D$ -Hermite polynomials. Using them, we give a representation of the Lie algebra  $G(0, 1)$ .

**Keywords and phrases:** Lie algebra  $G(0, 1)$ , polynomials  $Z_{m,n}^{(\beta)}(x, y)$ .

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