



**DIFFERENTIAL EQUATIONS OF ASSOCIATED  
2-VARIABLE 1-PARAMETER LEGENDRE-TYPE  
POLYNOMIALS  $R_n^\alpha(x, y; c)$**

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**Abstract**

Dattoli et al. [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 generating function of 2-variable Legendre-type polynomials  $R_n(x, y)$ .

We define associated 2-variable 1-parameter Legendre-type polynomials  $R_n^\alpha(x, y; c)$  and examine differential equations satisfied by them.

**Keywords and phrases:** differential equations, associated 2-variable 1-parameter Legendre-type polynomials.

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