



**LIE ALGEBRA AND GENERALIZED CLASSICAL  
LAGRANGE POLYNOMIALS**

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Received December 26, 2019

**Abstract**

We define generalized classical Lagrange polynomials [Arthur Erdélyi, Wilhelm Magnus, Fritz Oberhettinger and Francesco G. Tricomi, Higher Transcendental Functions, Vol. III, McGraw-Hill Book Company, Inc., New York, Toronto, London, 1955] (see also [Rabia Aktaş, Abdullah Altın and Fatma Taşdelen, A note on a family of two-variable polynomials, J. Comput. Appl. Math. 235(16) (2011), 4825-4833]). Using them, we construct a Lie algebra.

**Keywords and phrases:** Lie algebra, classical Lagrange polynomials.

**Pioneer Journal  
of Mathematics  
and Mathematical  
Sciences**



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Publisher