



**LIE ALGEBRA AND CLASSICAL LAGRANGE
POLYNOMIALS**

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Abstract

We construct a Lie algebra [Willard Miller, Jr., Lie theory and special functions, Mathematics in Science and Engineering, Vol. 43, Academic Press, New York and London, 1968] by using the 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, 19552] (see also [Rabia Aktaş, Abdullah Altin and Fatma Taşdelen, A note on a family of two-variable polynomials, J. Comput. Appl. Math. 235(16) (2011), 4825-4833]).

Keywords and phrases: Lie algebra, classical Lagrange polynomials.

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