



**REPRESENTATION OF THE LIE ALGEBRA
 K_5 AND HERMITE MATRIX
POLYNOMIALS**

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Received October 24, 2019; Revised November 11, 2019

Abstract

In [L. Jódar and R. Company, Hermite matrix polynomials and second order matrix differential equations, *Approx. Theory Appl. (N.S.)* 12(2) (1996), 20-30], L. Jódar and R. Company defined the Hermite matrix polynomials (HMP). We give a representation of the Lie algebra K_5 by using HMP.

Keywords and phrases: Lie algebra K_5 , Hermite matrix polynomials.

Pioneer Journal
of Mathematics
and Mathematical
Sciences



Pioneer Scientific
Publisher