



**REPRESENTATION OF LIE ALGEBRA K_5 AND
ADJOINT HERMITE POLYNOMIALS**

Tadayoshi Takebayashi

Received February 25, 2020

Abstract

Dattoli et al. [G. Dattoli, S. Lorenzutta, G. Maino and A. Torre, Theory of multi-index multivariable Bessel functions and Hermite polynomials, *Matematiche (Catania)* 52(1) (1997), 179-197] defined the adjoint Hermite polynomials $G_{m,n}(x, y)$. Using them, we give a representation of the Lie algebra K_5 .

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

**Pioneer Journal
of Mathematics
and Mathematical
Sciences**



**Pioneer Scientific
Publisher**