

ON S -EXPANSIONS AND OTHER TRANSFORMATIONS OF LIE ALGEBRAS

María Alejandra Alvarez

Universidad de Antofagasta, Chile

maalvarez3@gmail.com

The aim of this work is to study the relation between S -expansions and other transformations of Lie algebras. In particular, we prove that contractions, deformations and central extensions of Lie algebras are preserved by S -expansions. We also provide several examples and give conditions so transformations of reduced subalgebras of S -expanded algebras are preserved by the S -expansion procedure.

Trabajo en conjunto con Javier Rosales-Gómez (Universidad de Antofagasta, Chile).

Referencias

- [1] M. A. Alvarez, J. Rosales-Gómez, On S -expansions and other transformations of Lie algebras, J. Phys. A: Math. Theor. 56, (2023), 235204