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**María Alejandra Alvarez\*** ([maria.alvarez@uantof.cl](mailto:maria.alvarez@uantof.cl)), Angamos 601, Casilla 170, Universidad de Antofagasta, 1240000 Antofagasta, Chile. *On deformations of a family of 2-step nilradicals.*

Let  $\mathfrak{g}$  be a complex semisimple Lie algebra of finite dimension and  $\mathfrak{b}$  a Borel subalgebra of  $\mathfrak{g}$ . The parabolic subalgebras  $\mathfrak{p}$  of  $\mathfrak{g}$  that contain  $\mathfrak{b}$  are parameterized by the subsets  $\pi_0$  of simple roots of  $\mathfrak{g}$ . A parabolic subalgebra of  $\mathfrak{g}$  decomposes as a semidirect product of its Levi factor  $\mathfrak{g}_1$  and its nilradical  $\mathfrak{n}$ .

In this work, we consider a family of nilradicals  $\mathfrak{n}$  obtained by choosing  $\pi_0$  as the subset of two consecutive simple roots of  $A_n$ , and compute the group  $H^2(\mathfrak{n}, \mathfrak{n})$ . This group parameterize the infinitesimal deformations of  $\mathfrak{n}$ . (Received April 29, 2013)