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John E Haga* (hagaj@wit.edu), 550 Huntington Avenue, Department of Applied Mathematics, Wentworth Institute of Technology, Boston, MA 02115. *Levy Processes in a Step 3 Nilpotent Lie Group.*

The infinitesimal generators of Lévy processes in Euclidean space are pseudodifferential operators with symbols given by the Levy-Khintchine formula. This classical analysis relies heavily on Fourier analysis which, in the case when the state space is a Lie group, becomes much more subtle. Still the notion of pseudo-differential operators can be extended to connected, simply connected nilpotent Lie groups by employing the Weyl functional calculus. With respect to this definition, the generators of Levy processes in the simplest step 3 nilpotent Lie group G are pseudodifferential operators which admit $C_c(G)$ as its core. (Received September 20, 2016)