

© 2018 Heldermann Verlag
Journal of Lie Theory 28 (2018) 1043–1062

B. Cahen

Université de Lorraine, Dép. de Mathématiques, 3 rue Augustin Fresnel, 57073 Metz Cedex
03, France
benjamin.cahen@univ-lorraine.fr

Stratonovich-Weyl Correspondence for the Generalized Poincaré Group

We construct a Stratonovich-Weyl correspondence for each unitary irreducible representation of the generalized Poincaré group $\mathbb{R}^{n+1} \times SO_0(n, 1)$ associated with an integral coadjoint orbit with little group $SO(n)$, generalizing some results of J. F. Cariñena, J. M. Gracia-Bondía and J. C. Vàrilly [J. Phys. A: Math. Gen. 23 (1990) 901–933].

Keywords: Poincaré group, coadjoint orbit, unitary representation, Weyl quantization, Berezin quantization, Stratonovich-Weyl correspondence.

MSC: 81S10, 22E46, 22E45, 81R05