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Heisenberg Group and Energy-Momentum Conservative Law in de-Sitter Spaces LU Qi-Keng

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Abstract: In 1935 Dirac established the physical wave equations in the de-Sitter spaces but neither energy-momentum operators nor their conservative laws were given. In this article it is proved that in the de-Sitter group there is a subgroup group isomorphic to the Heisenberg group and the generators of this groups are the energy-momentum operators which obey a conservative law.

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Key words: energy-momentum conservation, Heisenberg group, de-Sitter space

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