

Quaternion version of the Landau operator

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Abstract

In this lecture, I give a mathematical justification of the Bohr correspondence principle and I show that the Landau operator is defined as the partial Fourier transform of the sub-Laplacian associated to the quaternion Heisenberg group $\mathfrak{Sm}\mathbb{H} \times_{\omega} \mathbb{H}$ of dimension 7.