

Spectral analysis for perturbed operators on Carnot groups

M?ntoiu, Marius

© 2017, Springer International Publishing. Let G be a Carnot group of homogeneous dimension M and Δ its horizontal sublaplacian. For $\lambda \in (0, M)$ we show that operators of the form $H_\lambda = (-\Delta)^\lambda + V$ have no singular spectrum, under generous assumptions on the multiplication operator V . The proof is based on commutator methods and Hardy inequalities.