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**Hardy Uncertainty Principle for Gabor Transform on Connected Nilpotent Lie Group.**

**Abstract**

We study the conjecture of Bansal, Kumar and Sharma, which is an analog of Hardy's theorem for Gabor transform in the setup of connected nilpotent Lie groups. To approach this conjecture, we use the orbit method and the Plancherel theory. When the Lie group  $G$  is simply connected, we show that the conjecture is true. Moreover, we extend this result further to connected nilpotent Lie groups with non-compact center.