

## The circular maximal operator on Heisenberg radial functions

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**Abstract.** Lebesgue space estimates are obtained for the circular maximal function on the Heisenberg group  $\mathbb{H}^1$  restricted to a class of Heisenberg radial functions. Under this assumption, the problem reduces to studying a maximal operator on the Euclidean plane. This operator has a number of interesting features: it is associated to a non-smooth curve distribution and, furthermore, fails both the usual rotational curvature and cinematic curvature conditions.

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