

## AN EXAMPLE ON THE MAXIMAL FUNCTION ASSOCIATED TO A NONDOUBLING MEASURE

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*Abstract*

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We show that there is a measure  $\mu$ , defined on the hyperbolic plane and with polynomial growth, such that the centered maximal operator associated to  $\mu$  does not satisfy weak type  $(1, 1)$  bounds.

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*Key words.* Maximal function, hyperbolic plane, nondoubling measure with polynomial growth.

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