

**ERRATUM: THE BEHAVIOR ON RADIAL FUNCTIONS
OF MAXIMAL OPERATORS ALONG ARBITRARY
DIRECTIONS AND THE KAKEYA
MAXIMAL OPERATOR**

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Unfortunately Lemma 4 of this paper is false. This invalidates inequality (3) and the results of §4. Nevertheless, the results of §§ 1–3 remain valid upon replacing (3) by the true inequality

$$(3') \quad \mathcal{M}_0 f(x) \leq C \{ f_0^\dagger(|x|) + Af_0(|x|) \},$$

where

$$Ag(r) = \sup_{0 < a < r} (r^2 - a^2)^{-1/2} \int_a^r g(u) u (u^2 - a^2)^{-1/2} du.$$

It is not hard to see that both terms on the right hand side of (3') are of restricted weak type n with respect to the measure $r^{n-1} dr$. Theorems 1 and 2 are now a formal consequence using interpolation. Moreover, Propositions 3 and 5 are still valid (but no longer needed for the proof of Theorem 2).

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