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# Вещественный, комплексный и функциональный анализ

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## REAL, COMPLEX AND FUNCTIONAL ANALYSIS

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### ПИСЬМО В РЕДАКЦИЮ LETTER TO THE EDITORS

In my article [1] lemma 2 and theorem 2 should be reformulated as follows.

**Lemma 2.** *There is a left invariant metric  $\rho'$  which is compatible with the topology of  $G$  such that every automorphism  $A \in \text{Aut}(G)$  is Lipschitz with respect to every left invariant metric  $\rho$  that is strongly equivalent to  $\rho'$ . Moreover, one can choose the Lipschitz constant to be*

$$L_A = \kappa_\rho \bmod A,$$

where the constant  $\kappa_\rho$  depends on the metric  $\rho$  only.

**Theorem 2.** *Let a left invariant metric  $\rho$  be as in lemma 2 and the doubling condition holds for the corresponding metric measure space  $(G, \rho, \nu)$ . Under the assumptions of definition 1 let  $(\Omega, q, \mu)$  be  $\sigma$ -compact quasi-metric space with positive Radon measure  $\mu$  and  $\Phi \in L^1(k^s \mu)$ , where  $k(u) := \kappa_\rho / \bmod A(u)$ . Then the operator  $\mathcal{H}_{\Phi, A}$  is bounded on the space  $H^1(G/K)$  and*

$$\|\mathcal{H}_{\Phi, A}\|_{\mathcal{L}(H^1(G/K))} \leq C_\nu \|\Phi\|_{L^1(k^s \mu)}.$$

The proof of lemma 2 above is exactly the same as in [2] and the proof of theorem 2 above is exactly the same as in [1].

After these corrections, the statements of corollaries 3 and 4 of theorem 2 in [1] are correct.

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### References

1. Mirotin AR. Hausdorff operators on homogeneous spaces of locally compact groups. *Journal of the Belarusian State University. Mathematics and Informatics*. 2020;2:28–35. DOI: 10.33581/2520-6508-2020-2-28-35.
2. Mirotin AR. Addendum to «Boundedness of Hausdorff operators on Hardy spaces  $H^1$  over locally compact groups» [J. Math. Anal. Appl. 473(2019)519–533]. *Journal of Mathematical Analysis and Applications*. 2019;479(1):872–874. DOI: 10.1016/j.jmaa.2019.06.055.

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