## Вещественный, комплексный и функциональный анализ

## Real, complex and functional analysis

## 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  $A \in \operatorname{Aut}(G)$  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

$$L_A = \kappa_{\rho} \operatorname{mod} A$$
,

where the constant  $\kappa_{o}$  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  $k(u) := \kappa_\rho / \text{mod } A(u)$ . Then the operator  $\mathcal{H}_{\Phi}$  is bounded on the space  $H^1(G/K)$  and

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

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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