
ERRATA

Erratum: “Measurability of Automorphisms of Topological Groups” [*Mathematical Notes* 68 (1–2), 90–96 (2000)]

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One can read on p. 91: “By Luzin’s theorem (see [4, Theorem 2.3.5]), for any $b > 0$, there exists a compact subset $C_b \subset G$ such that $\mu(G \setminus C_b) < b$ and $g|_{C_b}$ is continuous.”

This should read as follows: “By Luzin’s theorem (see [4, Theorem 2.3.5]), for any small $b > 0$ and for any (open) neighborhood V of the unit element with finite measure $b < \mu(V) < \infty$, there exists a compact subset $C_b \subset G$ such that $\mu(G \setminus C_b) < b$ and the restriction $g|_{C_b}$ is continuous.”

Comment: “Instead of the left-invariant Haar measure μ , one can also use the equivalent measure μ^* , which is quasiinvariant on $(G, Bf(G))$ with respect to G . Then the measurability of an automorphism $g \in \text{Aut}$ with respect to μ is equivalent to its measurability with respect to μ^* . Therefore, for a locally compact noncompact group G , this gives a new proof. Since, in Theorem 1 of Sec. 2, G is separable and locally compact, it follows that there exists a countable family of elements $f_j \in G$ and a neighborhood V of the unit element such that

$$\bigcup_j f_j V = G, \quad 0 < \mu(V) < \infty, \quad \mu^*(A) = \sum_{j=1}^{\infty} \mu(A \cap (f_j V)) / 2^j$$

for any A , a Borel subset in G , $A \in Bf(G)$, $0 < \mu^*(G) < \infty$, and μ^* can be chosen to be nontrivial and finite on G . Then, instead of μ , one can use μ^* and Luzin’s theorem.”

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