ERRATA: PERIODIC LOCALLY COMPACT GROUPS

Abstract. List of errata in our book.

Part I: Background Information on Locally Compact Groups

p. 11: Proposition 1.22(i): The word “OPEN” must be dropped, as the example $G = \mathbb{Z}$ with $U = \{0\}$ shows. The statement is correct in its entirety if $G$ is compact. The openness of $\text{SUB}(U)$ is not used in the sequel. Details can be found in [HJ20].

p. 65: Theorem 3.34: holds only if the finitely generated subgroup is pure, see [HHR19a, Theorem 4.16]. Indeed, let $G = \prod_{k \geq 1} \mathbb{Z}(p^k)$ and let $t := (1, 1, 1, \ldots)$ be the element with coordinates the respective generators of the cyclic groups $\mathbb{Z}(p^k)$ with $k \geq 1$. Then $\langle \overline{t} \rangle$ cannot split as a direct factor: indeed, if $G = \langle \overline{t} \rangle \oplus A$ then factoring $A$ implies that we can map $G$ onto $\langle \overline{t} \rangle \cong \mathbb{Z}_p$. But this is impossible, as all torsion elements of $G$ belong to the kernel and so does $G$.

p. 83: Lemma 3.74(ii): $\ldots$ is a direct sum of $N$ copies of the $\ldots$

p. 84: In the formula $(\ast)$ 3 lines above the bottom: Replace “I” by “m”.

Part II: Near Abelian Groups

p. 127: 3rd line: Replace “termed them “$t$-cyclic)” – a $\ldots$” by “termed them “$t$-cyclic)” – a $\ldots$”.

p. 127: Formula in the last line: replace “:” by “,”.

Part III: Applications

p. 229: Line 1: Replace “completing” by “reporting”.

p. 237: In the line before Example 12.16: Replace “with” by “which”.

p. 249: Theorem 13.12(b): Replace “the $p$-component $T_p$” by “for $p \in \phi$ the $p$-component $T_p$”.

p. 279: Theorem 14.28: An abelian factor $G_\alpha$ is missing. A corrected version can be read off from [HHR19b, Theorem 1.1].

p. 281: ff.: Without additional assumptions Proposition 14.31 is not correct. A correct version of the classification of all totally disconnected locally compact strongly topologically quasihamiltonian groups is Theorem 1.1 in [HHR19b].

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REFERENCES


