



Correction to: Devaney's and Li-Yorke's Chaos in Uniform Spaces

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Correction to: J Dyn Control Syst

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The original version of this article unfortunately contained a mistake.

In the second paragraph of Definition 2.4, we defined elements x and y to be asymptotic if for any $U \in \mathcal{U}$ and any $\{G_i | i \in \mathbb{N}\} \in \mathcal{G}$, there exists $k \in \mathbb{N}$ such that $(gx, gy) \in U$ for each $g \in G \setminus G_k$. However, this definition is incorrect, because it holds that x and y are asymptotic if and only if $x = y$. Thus the second paragraph of Definition 2.4 needs to be corrected as follows:

Elements x and y of X to be *asymptotic* if for any $U \in \mathcal{U}$ and any $\{G_i | i \in \mathbb{N}\} \in \mathcal{G}$, there exists $k \in \mathbb{N}$ such that $(gx, gy) \in U$ for each $g \in \bigcup_{i \in \mathbb{N}} G_i \setminus G_k$.

And the set AR of the fourth paragraph of Definition 2.4 should be denoted by

$$AR = \bigcap_{U \in \mathcal{U}} \bigcap_{\{G_i\} \in \mathcal{G}} \bigcup_{k \in \mathbb{N}} \bigcap_{g \in \bigcup_{i \in \mathbb{N}} G_i \setminus G_k} (g \times g)^{-1} \text{Cl}_X(U).$$

Along with the above corrections, we need to correct as follows:

- The phrase “let G be an Abelian group” in the statement of Theorem 1.2 is replaced by “let G be a countable Abelian group”. Similarly, the phrases “an Abelian group G ” in Lemma 3.6 and Proposition 3.7 are replaced by “a countable Abelian group G ”.
- In the proof of Lemma 3.6, the phrase “Let $(G_i)_{i \in \mathbb{N}}$ be an elements of \mathcal{G} with $G_1 = \emptyset$ ” of the line 1 in the second paragraph should be replaced by “Let $(G_i)_{i \in \mathbb{N}}$ be an elements of \mathcal{G} with $G_1 = \emptyset$ and $G = \bigcup_{i \in \mathbb{N}} G_i$ ”.

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