Erratum

P. Poláčik and I. Tereščák. Exponential separation and invariant bundles for maps in ordered Banach spaces with applications to parabolic equations. *J. Dynam. Diff. Eq.* 5, 279–303 (1993).

The galley proofs of the above paper apparently did not reach the publisher in time. As a result, besides some minor typographical errors, an insufficiency in a mathematical argument remained in the paper without any comment. (This mistake in the manuscript was found and kindly communicated to the authors by Toshiko Ogiwara and Ken-Ichi Nakamura.)

Arguments given for Claim 3 in the proof of Lemma 3.3 use implicitly a continuity of $x \mapsto \tilde{T}_x$ which is not available at this stage. However, for the proof of Lemma 3.3 a weaker claim is sufficient. Namely, let $\Pi: X \setminus \{0\} \rightarrow X$ denote the mapping $v \mapsto v/\|v\|$. Claim 3 and the arguments below it (lines 19–23, page 288) should be replaced by the following text.

Claim 3. For any x , $\Pi\tilde{T}_x V_x = \Pi V_{F_x}$. Since $0 \notin V_x$, as we show in Claim 4, these two sets are well defined. To see that they are equal, pick any $v \in V_x$ and choose the corresponding sequences as in (3.10). By Lemma 3.1a, we may assume without loss of generality that $\tilde{T}_{x_k} \rightarrow c\tilde{T}_x$ for a positive constant c . We then obtain

$$\tilde{T}_x v = \lim \tilde{T}_x \tilde{T}_{x_k}^{n_k} u_{n_k} = c^{-1} \lim \tilde{T}_{x_k} \tilde{T}_{x_k}^{n_k} u_{n_k} = c^{-1} \lim \tilde{T}_{x_k}^{n_k+1} u_{n_k}$$

hence $\Pi\tilde{T}_x v \in \Pi V_{F_x}$. This proves that $\Pi\tilde{T}_x V_x \subset \Pi V_{F_x}$. The proof of the other inclusion is similar and is left to the reader.

Because of this change, the following two modifications are needed in the remaining part of the proof of Lemma 3.3.

(1) Claim 4 should be stated as follows:

Claim 4. $0 \notin V_x$. (Note that this, in conjunction with Claim 3, implies that $V_x \subset \text{int } C$.)

(2) Lines 26–30, page 289, should be modified as follows:

Suppose u, v are linearly independent. For brevity we denote $A := \tilde{T}_{F^{-1}X}$. By Claim 3, there are $\bar{u}, \bar{v} \in X$ and constants $p, q > 0$ such that $p\bar{u}, q\bar{v} \in V_{F^{-1}X}$ and

$$u = A\bar{u}, \quad v = A\bar{v}$$

Obviously, $\bar{u}, \bar{v}$ are linearly independent and

$$\theta_{F^{-1}X} \leq \theta(p\bar{u}, q\bar{v}) = \theta(\bar{u}, \bar{v})$$

With these modifications the proof of Lemma 3.3 is complete.