A CORRECTION TO
"RECURRENT AND POISSON STABLE FLOWS"

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The main theorem in [2] contains an error which we want to correct here. In order to do this we introduce the following terminology relative to a flow \((X, \pi)\) on a Hausdorff phase space \(X\). We say that a set \(M \subset X\) (point \(x \in X\)) is approximated by weak attractors relative to an invariant set \(H \subset X\) provided each neighborhood \(U\) of \(M\) (of \(x\)) contains a weak attractor neighborhood \(V\) of \(M\) relative to the subflow \((H, \pi|_H)\). We say that \(M\) (or \(x\)) is approximated by weak attractors of a property \(P\) relative to \(H\) provided there exists at least one neighborhood \(V\) of property \(P\) satisfying the conditions of the definition above.

The proof given for Theorem 1 of [2] is correct except for a subtle incorrect assumption which our new condition corrects. By reasoning in a manner somewhat similar to that proof we obtain the following corrected version of the theorem. Its proof will appear elsewhere.

**Theorem.** A flow on a locally compact Hausdorff space \(X\) is recurrent if and only if it is (positively, negatively) bilaterally Poisson stable and each point is approximated by compact (positive, negative) weak attractors relative to its orbit closure.

Of course, the two corollaries of Theorem 1 must also reflect this change.

Gottschalk's example [1, p. 764] of a nonrecurrent bilaterally Poisson stable flow on a compact metric space shows that Poisson stability alone is not sufficient in Theorem 1.

**References**