

THE ASYMPTOTIC MASLOV INDEX AND ITS APPLICATIONS

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1. ERRATUM

In [1, Page 1419] it is erroneously claimed that a section $\mathbb{E} : \Sigma \rightarrow \Lambda(\Sigma)$ of the Lagrangian-Grassmann bundle $\Lambda(\Sigma)$ provides a trivialization of the bundle. Fortunately, this mistake has no consequences for the results in the paper, but it does affect their presentation. We briefly indicate what modifications should be made.

The section \mathbb{E} does provide a globally defined function $\det_{\mathbb{E}}^2 : \Lambda(\Sigma) \rightarrow S^1$ which in turn defines the Maslov cocycle of the section $\mathfrak{M}_{\mathbb{E}} \in H^1(\Lambda(\Sigma), \mathbb{Z})$. The circle-valued function $\det_{\mathbb{E}}^2$ also determines (when \mathbb{E} is C^1) a 1-form $\eta_{\mathbb{E}}$ and the proof of the key equality (1) on Page 1420 remains true with the obvious adjustments.

The other instance in which the trivialization is used, is in the proof of Theorem 4.2. Again, this causes no trouble since one can trivialize the bundle over the interval $[t_1, t_2]$ under consideration.

We thank Leonardo Macarini for alerting us of this mistake.

REFERENCES

- [1] G. Contreras, J.M. Gambaudo, R. Iturriaga and G.P. Paternain, *The asymptotic Maslov index and its applications*, Ergodic Theory Dynam. Systems **23** (2003), 1415–1443.