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CORRECTION TO "A CHARACTERISATION OF THE TIGHT THREE-SPHERE"

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In our paper "A characterisation of the tight three-sphere," *Duke Mathematical Journal*, Volume 81, Number 1, there is a gap in the bubbling-off analysis, which will be filled in this correction. The results remain unaffected. However, the assertion on page 220, last line, "Every holomorphic curve produced takes at least the amount σ_0 of $d\lambda$-energy away," might not be correct. Due to this fact, our inductive method might not stop. In order to resolve this problem, we have to take a slightly different reparametrisation during the bubbling-off analysis. It still might produce holomorphic curves with $d\lambda$-energy equal to zero. However, such a curve would necessarily have at least two negative punctures. This will be sufficient for our iteration procedure to work also in the presence of pseudoholomorphic curves of zero $d\lambda$-energy, as we shall show. The following paragraphs replace page 216, line 5 to the end of the paper. The figures we refer to are those of the original paper. We have updated the references and reprint them here for the reader's convenience.

We shall study the behaviour of $\tilde{u}_k$ near a puncture $z^i \in \Gamma$ in detail. In view of the C^∞-convergence on $D\backslash\Gamma$, we have, denoting by $S_\varepsilon(z^i)$ small circles around z^i, that $u_k|S_\varepsilon(z^i) \to u|S_\varepsilon(z^i)$. Hence, for $\varepsilon > 0$ and sufficiently small, the following limit exists:

$$m_\varepsilon(z^i) = \lim_{k\to\infty} \int_{B_\varepsilon(z^i)} u_k^*\, d\lambda = \lim_{k\to\infty} \int_{\partial B_\varepsilon(z^i)} u_k^*\lambda = \int_{S_\varepsilon(z^i)} u^*\lambda.$$

As $\varepsilon \to m_\varepsilon(z^i)$ is monotone and, in view of (133), bounded, we can define the mass of the bubble point z^i by

$$m(z^i) = \lim_{\varepsilon\to 0} m_\varepsilon(z^i).$$

Recall that $d_0 > 0$ is the infimum over all periods of contractible periodic solutions of the Reeb vector field X. We conclude from (133), arguing as in the bubbling-off analysis in [20], that

$$d_0 \leqslant m(z^i) < A(P_0) \qquad \text{all } z^i \in \Gamma. \tag{140}$$

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