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CORRECTIONS

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To "The relationship between the index of a strongly stable periodic linear Hamiltonian vectorfield and the index of its stability domain", Duke Math. J. **45** (1978), 701–709.

The author would like to thank Prof. J. V. Ralston for bringing corrections 1, 5, 6, 7, and the first sentence of 2 to his attention.

1. Equation 1) on page 701 should read

$$\mathcal{I}(\Phi) = \tfrac{1}{2}\big(\operatorname{ind} \operatorname{gr} \Phi + \operatorname{ind} \sigma^{\#} \circ (-A)\big) - n.$$

The same correction should be made on line 6 − (from the bottom) on page 704; line 1 − on page 706; and line 2 + (from the top) on page 707. (See correction 5.)

2. Because the symplectic form σ_1 on $\mathbf{R}^{2n}$ in [1, p. 180, equation 1.24] is the negative of our σ (see lemma on page 702), equation 2) on page 702 must be changed. Using the definition of ind [1, p. 184, equation 2.14] and noting that the intersection number and Q change sign when the sign of the symplectic form is changed, we get

$$\operatorname{ind}_1 \operatorname{gr} \Phi = -\big[\operatorname{gr} \Phi;\ \mu\big] + \operatorname{ind} - Q(\operatorname{gr} I,\ \mu;\ \operatorname{gr} \Phi(1))$$

where the left hand side uses σ_1 and the right hand side uses σ.

$$= -\big[\operatorname{gr} \Phi;\ \mu\big] + 2n - \operatorname{ind} Q(\operatorname{gr} I,\ \mu;\ \operatorname{gr} \Phi(1))$$

$$- \operatorname{nul} Q(\operatorname{gr} I,\ \mu;\ \operatorname{gr} \Phi(1)).$$

Thus equation 2) on page 702 should read

$$M = n - \operatorname{ind} \operatorname{gr} \Phi - \dim \operatorname{gr} I \cap \operatorname{gr} \Phi(1)$$

because $M = \operatorname{ind}_1 \operatorname{gr} \Phi - n$.

3. Since $\operatorname{gr} I \cap \operatorname{gr} \Phi(1) = 0$ (see line 8 − on page 705) for strongly stable systems, equation 3) on page 702 should read

$$\mathcal{I}(\Phi) = \tfrac{1}{2}\big(\operatorname{ind} \sigma^{\#} \circ (-A) - M - n\big)$$

$$= \tfrac{1}{2}\big(n - \operatorname{ind} \sigma^{\#} \circ (A) - M\big)$$

because $\sigma^{\#} \circ (-A)$ is nondegenerate (see page 706 line 8 −) and line 9 − on

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