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ERRATUM

Volume **154**, Number 1 (1999), in the article "Bridges between the Generalized Sitnikov Family and the Lyapunov Family of Periodic Orbits," by Jaume Llibre, Kenneth R. Meyer, Jaume Soler, pages 140–156 (doi:10.1006/jdeq.1998.3565): There are several errors in theory and computations in this paper which were pointed out by A. Bruno. A sign error was made in transcribing the theorems from Ref. [11]. Theorem 2.3 should read:

THEOREM 2.3. *If in addition to the hypothesis of Theorems* 2.1 *and* 2.2 *the quantities* M_1 *and* M_2 *are defined and nonzero with the same sign, then there exists bridges of periodic solutions between the two Lyapunov families.*

If the quantities M_1 *and* M_2 *are of opposite sign, then there exists a natural center of periodic solutions emanating from the equilibrium when frequencies are at resonance.*

The *frequencies are at resonance* for those values of the parameter δ such that $\omega_1/\omega_2 = p/q$, where p, q are relatively prime integers. A *natural center* is a family of periodic solutions parameterized by the value of H which emanates from the equilibrium with period T which approaches $q2\pi/\omega_2 = p2\pi/\omega_1$ when the frequencies are at resonance.

For $\mu = 1/2$ the constants A, B, and C on page 147 should be

$$A = (-9(7977 + 5536\sqrt{2}))/(224(67 + 48\sqrt{2})) \approx -4.70830,$$
$$B = (-9(32 + 13\sqrt{2}))/(\sqrt{-3 + 8\sqrt{2}}(32 + 20\sqrt{2})) \approx -2.60880,$$
$$C = -9/2.$$

The constants M_1, M_2 are the same as given on page 148, and because they are of opposite sign, natural centers occur.

For Hill's problem the constants are

$$A = \sqrt[6]{3}(12470\sqrt{3} - 45269\sqrt{21})/1122184 \approx -0.198893,$$
$$B = 9\sqrt[6]{3}\sqrt{(-383 + 146\sqrt{7})}/7/232 \approx 0.0318891,$$
$$C = -9\sqrt[3]{9}/116 \approx -0.161386.$$

The constants M_1, M_2 are of opposite sign and so natural centers occur.