

ERRATA for
Canonical Perturbation Theories
Degenerate Systems and Resonance

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1. page 54, Eqn.(2.101) – Replace $\frac{\partial S}{\partial q_1}$ with $\frac{\partial S}{\partial q_i}$.
2. page 56, last line – Replace (2.97) with (2.99).
3. page 79, Eqn.(3.66) – Replace $(\frac{\partial S}{\partial \theta_i})^2$ with $(\frac{\partial S}{\partial \theta_1})^2$.
4. page 80, Eqn.(3.67) – Replace $2\frac{\partial A_s^*}{\partial J_1^*}A_s^*$ with $\frac{\partial A_s^*}{\partial J_1^*}A_s^*$.
5. page 85, Eqn.(3.88) – Replace $(\theta_1 - 2\theta_2, \theta_2, J^*)$ with $(\theta_1 - 2\theta_2, \theta_3, J^*)$.
6. page 123, third equation – Replace the factor $\frac{\nu_{11}^*}{8\Lambda_2^{3/4}}$ with $-\frac{\nu_{11}^*}{8\Lambda_2^{3/4}}$.
7. page 123, Eqn.(4.111) – Replace $-\frac{\Lambda_1}{8\Lambda_2}$ with $-\frac{\Lambda_1 w_1}{4\Lambda_2} \left(1 + \frac{\nu_{11}^*}{8\dot{w}_1}\right)$.
8. page 131, Eqn. (5.19) – Replace $k^n D_W f$ with $k^n D_W^n f$.
9. page 159, line 3 from bottom – Replace *differ for* with *differ from*.
10. page 163, last line – Replace Jdw with $Jd\theta$.
11. page 193, last line – Replace *Sect.* B.3.1 with *Sects.* B.3.1 and B.4.
12. page 194, first equation after Eqn. (8.42) – Replace $\partial S(\theta_1, J)$ with $\partial S(\theta_1, \Lambda)$. In this example, $S(\theta_1, \Lambda)$ is not the full generating function of the canonical transformation $(\theta, J) \rightarrow (w, \Lambda)$ but the part of that generating function independent of θ_2 .

13. page 194, second and third equations after Eqn. (8.42) – Replace $\Lambda_2(\theta_2 - \theta_1)$ with $-\Lambda_2\theta_1$.
14. page 194, third equation after Eqn. (8.42) – Replace $-\Lambda_1 \arcsin$ with $+\Lambda_1 \arcsin$.
15. page 196, first line of the paragraph before Eqn (8.52) – Replace H_5^* with H^* .
16. page 200, Fig 8.2 – Replace $\sqrt{-I_3}$ with $\sqrt{-2I_3}$ and replace $\sqrt{-\Lambda_2}$ with $\sqrt{-2\Lambda_2}$.
17. page 209, second line after Eqn. 9.1 – Replace $\sqrt{-4\nu_1^\circ/\nu_{11}^\circ}$ with $\sqrt{-2\nu_1^\circ/\nu_{11}^\circ}$.
18. page 210, lines 4 and 9 – Same correction as above.
19. page 242, Section 10.5 – The title should be **The Circular Restricted 3-Body Problem**.
20. page 250, third line of Eqns. (10.77) – Replace $\frac{1}{6}$ with $-\frac{1}{6}$.
21. page 254, second line after Eqn. (10.86) – Replace H_1 with X_3 .
22. page 299, two lines before Eqn. (C.34) – Replace *Sect.* 1.5.2 with *Exercise* 1.3.2.
23. page 307, Eqn. (C.63) – Replace $\sqrt{3e_1}$ with $\sqrt{3e_2}$.
24. page 308, fourth line after Eqn.(C.66) – Replace *that is* with *and that*.

last update: November 9, 2018