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**The stability problem and the existence of periodic orbits in the heavy top dynamics.**

(English) [Zbl 1103.70302](#)

Mladenov, Ivaïlo M. (ed.) et al., Proceedings of the 4th international conference on geometry, integrability and quantization, Sts. Constantine and Elena, Bulgaria, June 6–15, 2002. Sofia: Coral Press Scientific Publishing (ISBN 954-90618-4-1/pbk). 248-256 (2003).

From the paper: A detailed analysis for the Lagrange top of spectral stability, nonlinear stability (using the energy-Casimir methods), and the existence of periodic orbits (using results of *J. Moser* [Commun. Pure Appl. Math. 29, No. 6, 727–747 (1976; [Zbl 0346.34024](#))] .

For the entire collection see [[Zbl 1008.00022](#)].

**MSC:**

[70E50](#) Stability problems in rigid body dynamics

[70K42](#) Equilibria and periodic trajectories for nonlinear problems in mechanics