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Periodic solutions of Hamiltonian systems. (English) Zbl 0358.70014
Commun. Pure Appl. Math. **31**, 156-184 (1978).

This paper concerns the existence of periodic solutions of the Hamiltonian system:

$$\dot{p} = -H_q, \quad \dot{q} = H_p. \quad (*)$$

In §1 conditions are given on $H(p, q)$ for (*) to possess solutions having prescribed energy and in §2 having prescribed period. For the latter case H is also permitted to depend on t .

Reviewer: [Paul H. Rabinowitz](#)

For a scan of this review see the [web version](#).

MSC:

- 70G10** Generalized coordinates; event, impulse-energy, configuration, state, or phase space for problems in mechanics
- 70H05** Hamilton's equations
- 34C25** Periodic solutions to ordinary differential equations

Cited in **18** Reviews
Cited in **215** Documents

Full Text: [DOI](#)

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