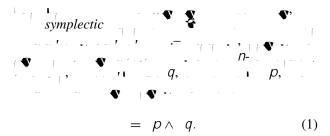
SYMPLECTIC MAPS

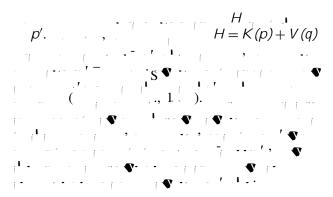


 $(q_i, p_i), i = 1, \dots, n, \dots, n$

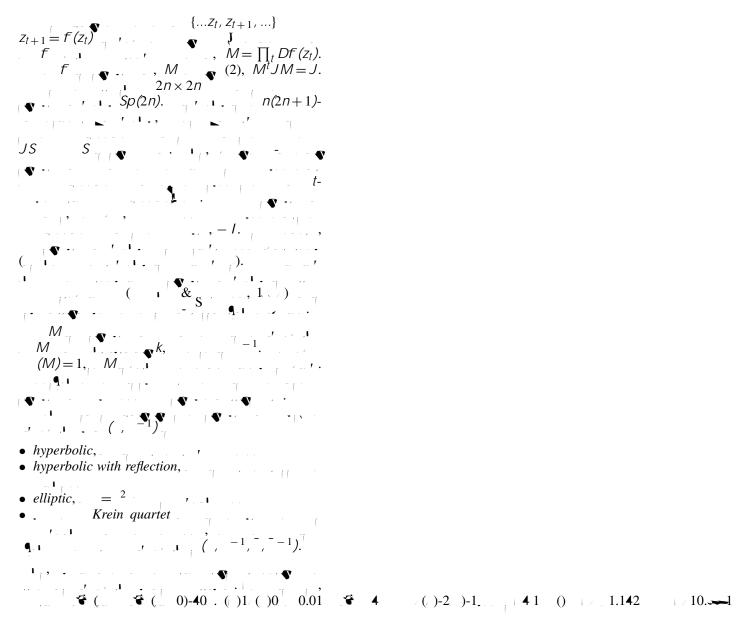
$$(f) = qp' + tH(q, p')$$

$$F = q' p' + p q, f = q'$$

$$q' = q + t \frac{H}{p'}(q, p'), \quad p' = p - t \frac{H}{q}(q, p').$$
(4)



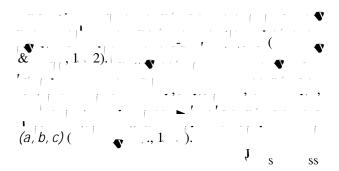
The Symplectic Group



S

-¢, $m \cdot$ (0) $\neq n$ n. т , T 11. 17 C--D (0), (п-(1)1 T 1 I T ı. , beyond all orders. ı. T . $\mathbb{S} \times \mathbb{R}$ ($\vec{p} \ge c > 0.$) Т, Г 1 , I • I. Lipschitz graph, p = P(q), I ı. • cantorus , • I I **S S**

(** 2001). (1, 1)



See also Aubry-Mather theory; Cat map; Chaotic dynamics; Constants of motion and conservation laws; Ergodic theory; Fermi acceleration and Fermi map; Hamiltonian systems; Hénon map; Horseshoes and hyperbolicity in dynamical systems; Lyapunov exponents; Maps; Measures; Melnikov method; Phase space; Standard map

Further Reading

- Mathematical Methods of Classical , ... 1 ς. Mechanics, . 1
- Beam Dynamics: A New Attitude and , . 1 Framework (The Physics and Technology of Particle and Photon Beams),
- 4 , . 2001. Symplectic Twist Maps: Global Variational Techniques, s_'
- S , . 1 ī **.** .

Manuscript Queries

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