



Sinai switched dynamical systems on the plane

A.N.Rybko

Let $H_1(p, q)$, $H_2(p, q)$ be two time-independent Hamiltonians with one degree of freedom and $\{S_1^t\}$, $\{S_2^t\}$ be the one-parametric groups of shifts along the orbits of Hamiltonian systems generated by H_1 , H_2 . In some problems of population genetics there appear the transformations of the plane having the form $T^{(h_1, h_2)} = S_2^{h_2} \cdot S_1^{h_1}$ under some conditions on H_1 , H_2 . We study asymptotical properties of trajectories of $T^{(h_1, h_2)}$.