
ANDRÉS PEDROZA, Universidad de Colima, Facultad de Ciencias, Bernal Díaz del Castillo No. 340, Col. Villas San Sebastián, C.P. 28045, Colima, Colima, México

Seidel's Morphism on the Hamiltonian Group of a Cartesian Product

The Seidel homomorphism is a map from the fundamental group of the group of Hamiltonian diffeomorphisms, $\text{Ham}(M, \omega)$, to the quantum homology ring $QH_*(M; \Lambda)$. Using this homomorphism we give a sufficient condition for when a nontrivial loop ψ in $\text{Ham}(M, \omega)$ determines a nontrivial loop $\psi \times \text{id}_N$ in $\text{Ham}(M \times N, \omega \oplus \eta)$, where (N, η) is a closed symplectic manifold such that $\pi_2(N) = 0$. Recently, R. Leclercq generalized this result by removing the topological constraint on N .