

**LAGRANGIAN MANIFOLDS, CLASSICAL HAMILTONIAN SYSTEMS  
AND MASLOV INDICES CORRESPONDING TO THE SPECTRAL SERIES  
OF THE SCHROEDINGER OPERATORS WITH DELTA-POTENTIALS.**

ANDREY SHAFAREVICH

We study spectral series of the Schroedinger operator with delta-type potential on 2D or 3D Riemannian spherically symmetric manifold. Lagrangian manifolds, corresponding to these series, do not coincide with the standard Liouville tori. We describe topological structure of these manifolds as well as Maslov indices, entering quantization conditions. In particular, we study the effect of the jump of the Maslov index via passing through the critical values of the multipliers of the delta-functions.

SHAFAREVICH ANDREY IGOREVICH,  
LOMONOSOV MOSCOW STATE UNIVERSITY,  
1 LENINSKIYE GORY,  
119991, MOSCOW, RUSSIA  
*E-mail address:* shafarev@yahoo.com