

# Contents

Denjoy subsystems and horseshoes	1
MARIE-CLAUDE ARNAUD	
Impact Hamiltonian systems and polygonal billiards	29
L. BECKER, S. ELLIOTT, B. FIRESTER, S. GONEN COHEN, MICHAL PNUELI AND VERED ROM-KEDAR	
Some remarks on the classical KAM theorem, following Pöschel	67
ABED BOUNEMOURA	
Some recent developments in Arnold diffusion	75
CHONG-QING CHENG AND JINXIN XUE	
Viscosity solutions of the Hamilton–Jacobi equation on a noncompact manifold	111
ALBERT FATHI	
Holonomy and vortex structures in quantum hydrodynamics	173
MICHAEL S. FOSKETT AND CESARE TRONCI	
Surfaces of locally minimal flux	215
ROBERT S. MACKAY	
A symplectic approach to Arnold diffusion problems	229
JEAN-PIERRE MARCO	
Hamiltonian ODE, homogenization, and symplectic topology	297
FRAYDOUN REZAKHANLOU	

