

IMPACT OF MODERN DYNAMICS IN ASTRONOMY

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The present volume of proceedings contains review and research papers concerning the impact of modern dynamics in astronomy. Modern dynamics is playing an increasing role in the solution of problems raised by astronomical observations. This new relationship is being fostered by recent discoveries of new systems, such as the Kuiper belt, pulsar and star companions; by progress in theoretical dynamics, like KAM and Nekhorochev theories and adiabatic invariants; and by the dissemination of fast computers. The two main areas of applications which are discussed are 'stellar systems', including dynamics of galaxies, and 'small bodies in the solar system'. In both cases the concepts and tools of chaotic motion are considered and fully discussed.

This book is an up-to-date source of information to astronomers interested in the dynamics of the solar system or of stellar systems, as well as to dynamicists who wish to understand the impact of modern theories of chaos in astronomy.

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