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<<经典力学和天体力学中的数学论题

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内容概要

This work describes the fundamental principles, problems, and methods of classical mechanics focussing on its mathematical aspects. The authors have striven to give an exposition stressing the working apparatus of classical mechanics, rather than its physical foundations or applications. This apparatus is basically contained in Chapters 1, 3, 4 and 5. Chapter 1 is devoted to the fundamental mathematical models which are usually employed to describe the motion of real mechanical systems. Special consideration is given to the study of motion under constraints, and also to problems concerned with the realization of constraints in dynamics. This work describes the fundamental principles, problems, and methods of classical mechanics focussing on its mathematical aspects. The authors have striven to give an exposition stressing the working apparatus of classical mechanics, rather than its physical foundations or applications. This apparatus is basically contained in Chapters 1, 3, 4 and 5. Chapter 1 is devoted to the fundamental mathematical models which are usually employed to describe the motion of real mechanical systems. Special consideration is given to the study of motion under constraints, and also to problems concerned with the realization of constraints in dynamics.

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