


[DOWNLOAD](#)


Mathematical Methods of Classical Mechanics

By Arnold, Vladimir I.

Book Condition: New. Publisher/Verlag: Springer, Berlin | In this text, the author constructs the mathematical apparatus of classical mechanics from the beginning, examining all the basic problems in dynamics, including the theory of oscillations, the theory of rigid body motion, and the Hamiltonian formalism. This modern approach, based on the theory of the geometry of manifolds, distinguishes itself from the traditional approach of standard textbooks. Geometrical considerations are emphasized throughout and include phase spaces and flows, vector fields, and Lie groups. The work includes a detailed discussion of qualitative methods of the theory of dynamical systems and of asymptotic methods like perturbation techniques, averaging, and adiabatic invariance. | I Newtonian Mechanics.- 1 Experimental facts.- 2 Investigation of the equations of motion.- II Lagrangian Mechanics.- 3 Variational principles.- 4 Lagrangian mechanics on manifolds.- 5 Oscillations.- 6 Rigid bodies.- III Hamiltonian Mechanics.- 7 Differential forms.- 8 Symplectic manifolds.- 9 Canonical formalism.- 10 Introduction to perturbation theory.- Appendix 1 Riemannian curvature.- Appendix 2 Geodesics of left-invariant metrics on Lie groups and the hydrodynamics of ideal fluids.- Appendix 3 Symplectic structures on algebraic manifolds.- Appendix 4 Contact structures.- Appendix 5 Dynamical systems with symmetries.- Appendix 6 Normal forms of quadratic hamiltonians.- Appendix 7 Normal...


[READ ONLINE](#)

[3.95 MB]

Reviews

Thorough guide for ebook lovers. I am quite late in start reading this one, but better then never. Its been designed in an remarkably straightforward way which is simply soon after i finished reading this publication in which actually altered me, affect the way i think.

-- **Gunner Labadie**

The book is great and fantastic. Yes, it really is engage in, still an interesting and amazing literature. You wont feel monotony at at any moment of your respective time (that's what catalogs are for regarding if you request me).

-- **Daren Raynor II**

Related PDFs



TJ new concept of the Preschool Quality Education Engineering: new happy learning young children (3-5 years old) daily learning book Intermediate (2)(Chinese Edition)

paperback. Book Condition: New. Ship out in 2 business day, And Fast shipping, Free Tracking number will be provided after the shipment.Paperback. Pub Date :2005-09-01 Publisher: Chinese children before making Reading: All books are the Youth Pre-employment Training software download generated pictures...



Grandpa Spanielson's Chicken Pox Stories: Story #1: The Octopus (I Can Read Book 2)

HarperCollins, 2005. Book Condition: New. Brand New, Unread Copy in Perfect Condition. A+ Customer Service! Summary: Foreword by Raph Koster. Introduction. I. EXECUTIVE CONSIDERATIONS. 1. The Market. Do We Enter the Market? Basic Considerations. How and Which Niche? Market Analysis: Who Are...



Barabbas Goes Free: The Story of the Release of Barabbas Matthew 27:15-26, Mark 15:6-15, Luke 23:13-25, and John 18:20 for Children

Paperback. Book Condition: New.



TJ new concept of the Preschool Quality Education Engineering the daily learning book of: new happy learning young children (2-4 years old) in small classes (3)(Chinese Edition)

paperback. Book Condition: New. Ship out in 2 business day, And Fast shipping, Free Tracking number will be provided after the shipment.Paperback. Pub Date :2005-09-01 Publisher: Chinese children before making Reading: All books are the Youth Pre-employment Training software download generated pictures...



Edge] the collection stacks of children's literature: Chunhyang Qiuyun 1.2 --- Children's Literature 2004(Chinese Edition)

paperback. Book Condition: New. Ship out in 2 business day, And Fast shipping, Free Tracking number will be provided after the shipment.Paperback. Pub Date: 2005 Pages: 815 Publisher: the Chinese teenager Shop Books all book. the genuine special part of the spot...



The Clever Detective Boxed Set (a Fairy Tale Romance): Stories 1, 2 and 3

Createspace, United States, 2012. Paperback. Book Condition: New. 229 x 152 mm. Language: English . Brand New Book ***** Print on Demand *****.After six years as a private investigator, Stacey Alexander has the strangest day of her life when she falls down...