



The KAM Story: A Friendly Introduction to the Content, History, and Significance of Classical Kolmogorov-Arnold-Moser Theory

H Scott Dumas

Download now

[Click here](#) if your download doesn't start automatically

The KAM Story: A Friendly Introduction to the Content, History, and Significance of Classical Kolmogorov-Arnold-Moser Theory

H Scott Dumas

The KAM Story: A Friendly Introduction to the Content, History, and Significance of Classical Kolmogorov-Arnold-Moser Theory H Scott Dumas

This is a semi-popular mathematics book aimed at a broad readership of mathematically literate scientists, especially mathematicians and physicists who are not experts in classical mechanics or KAM theory, and scientific-minded readers. Parts of the book should also appeal to less mathematically trained readers with an interest in the history or philosophy of science.

The scope of the book is broad: it not only describes KAM theory in some detail, but also presents its historical context (thus showing why it was a “breakthrough”). Also discussed are applications of KAM theory (especially to celestial mechanics and statistical mechanics) and the parts of mathematics and physics in which KAM theory resides (dynamical systems, classical mechanics, and Hamiltonian perturbation theory).

Although a number of sources on KAM theory are now available for experts, this book attempts to fill a long-standing gap at a more descriptive level. It stands out very clearly from existing publications on KAM theory because it leads the reader through an accessible account of the theory and places it in its proper context in mathematics, physics, and the history of science.

Contents:

- Introduction
- Minimum Mathematical Background
- Leading Up to KAM: A Sketch of the History
- KAM Theory
- KAM in Context: Questions, Consequences, Significance
- Other Results in Hamiltonian Perturbation Theory (HPT)
- Physical Applications
- **Appendices:**
 - Kolmogorov's 1954 Paper
 - Overview of Low-Dimensional Small Divisor Problems
 - East Meets West — Russians, Europeans, Americans
 - Guide to Further Reading
 - Selected Quotations
 - Glossary

Readership: Undergraduates, graduates, and researchers broadly interested in Hamiltonian perturbation theory, statistical mechanics, ergodic theory, Nekhoroshev theory, Arnold diffusion, nonlinear dynamics, dynamical systems, chaos theory, classical mechanics, and the history of these subjects.

 [Download The KAM Story:A Friendly Introduction to the Conte ...pdf](#)

 [Read Online The KAM Story:A Friendly Introduction to the Con ...pdf](#)

Download and Read Free Online The KAM Story:A Friendly Introduction to the Content, History, and Significance of Classical Kolmogorov-Arnold-Moser Theory H Scott Dumas

From reader reviews:

Gregory Mackenzie:

Why don't make it to become your habit? Right now, try to ready your time to do the important behave, like looking for your favorite reserve and reading a publication. Beside you can solve your problem; you can add your knowledge by the e-book entitled The KAM Story:A Friendly Introduction to the Content, History, and Significance of Classical Kolmogorov-Arnold-Moser Theory. Try to the actual book The KAM Story:A Friendly Introduction to the Content, History, and Significance of Classical Kolmogorov-Arnold-Moser Theory as your close friend. It means that it can to be your friend when you really feel alone and beside that course make you smarter than previously. Yeah, it is very fortunated to suit your needs. The book makes you far more confidence because you can know anything by the book. So , we should make new experience and also knowledge with this book.

Mary Redus:

Book is to be different for every grade. Book for children until finally adult are different content. As you may know that book is very important for us. The book The KAM Story:A Friendly Introduction to the Content, History, and Significance of Classical Kolmogorov-Arnold-Moser Theory ended up being making you to know about other understanding and of course you can take more information. It is very advantages for you. The publication The KAM Story:A Friendly Introduction to the Content, History, and Significance of Classical Kolmogorov-Arnold-Moser Theory is not only giving you far more new information but also to become your friend when you truly feel bored. You can spend your spend time to read your publication. Try to make relationship with all the book The KAM Story:A Friendly Introduction to the Content, History, and Significance of Classical Kolmogorov-Arnold-Moser Theory. You never experience lose out for everything if you read some books.

Donald Sigman:

A lot of book has printed but it is different. You can get it by internet on social media. You can choose the most effective book for you, science, witty, novel, or whatever by means of searching from it. It is identified as of book The KAM Story:A Friendly Introduction to the Content, History, and Significance of Classical Kolmogorov-Arnold-Moser Theory. Contain your knowledge by it. Without leaving the printed book, it might add your knowledge and make a person happier to read. It is most important that, you must aware about guide. It can bring you from one location to other place.

Antonio Ritchie:

Reserve is one of source of understanding. We can add our knowledge from it. Not only for students but in addition native or citizen will need book to know the change information of year to year. As we know those guides have many advantages. Beside all of us add our knowledge, can bring us to around the world. By the book The KAM Story:A Friendly Introduction to the Content, History, and Significance of Classical

Kolmogorov-Arnold-Moser Theory we can have more advantage. Don't someone to be creative people? For being creative person must like to read a book. Just simply choose the best book that acceptable with your aim. Don't always be doubt to change your life at this book The KAM Story:A Friendly Introduction to the Content, History, and Significance of Classical Kolmogorov-Arnold-Moser Theory. You can more inviting than now.

**Download and Read Online The KAM Story:A Friendly
Introduction to the Content, History, and Significance of Classical
Kolmogorov-Arnold-Moser Theory H Scott Dumas
#HUF9GSN5V31**

Read The KAM Story:A Friendly Introduction to the Content, History, and Significance of Classical Kolmogorov-Arnold-Moser Theory by H Scott Dumas for online ebook

The KAM Story:A Friendly Introduction to the Content, History, and Significance of Classical Kolmogorov-Arnold-Moser Theory by H Scott Dumas Free PDF d0wnl0ad, audio books, books to read, good books to read, cheap books, good books, online books, books online, book reviews epub, read books online, books to read online, online library, greatbooks to read, PDF best books to read, top books to read The KAM Story:A Friendly Introduction to the Content, History, and Significance of Classical Kolmogorov-Arnold-Moser Theory by H Scott Dumas books to read online.

Online The KAM Story:A Friendly Introduction to the Content, History, and Significance of Classical Kolmogorov-Arnold-Moser Theory by H Scott Dumas ebook PDF download

The KAM Story:A Friendly Introduction to the Content, History, and Significance of Classical Kolmogorov-Arnold-Moser Theory by H Scott Dumas Doc

The KAM Story:A Friendly Introduction to the Content, History, and Significance of Classical Kolmogorov-Arnold-Moser Theory by H Scott Dumas Mobipocket

The KAM Story:A Friendly Introduction to the Content, History, and Significance of Classical Kolmogorov-Arnold-Moser Theory by H Scott Dumas EPub