



# Galactic Dynamics: Second Edition (Princeton Series in Astrophysics)

By James Binney, Scott Tremaine

Download now

Read Online ➔

**Galactic Dynamics: Second Edition (Princeton Series in Astrophysics)** By James Binney, Scott Tremaine

Since it was first published in 1987, *Galactic Dynamics* has become the most widely used advanced textbook on the structure and dynamics of galaxies and one of the most cited references in astrophysics. Now, in this extensively revised and updated edition, James Binney and Scott Tremaine describe the dramatic recent advances in this subject, making *Galactic Dynamics* the most authoritative introduction to galactic astrophysics available to advanced undergraduate students, graduate students, and researchers.

Every part of the book has been thoroughly overhauled, and many sections have been completely rewritten. Many new topics are covered, including N-body simulation methods, black holes in stellar systems, linear stability and response theory, and galaxy formation in the cosmological context. Binney and Tremaine, two of the world's leading astrophysicists, use the tools of theoretical physics to describe how galaxies and other stellar systems work, succinctly and lucidly explaining theoretical principles and their applications to observational phenomena. They provide readers with an understanding of stellar dynamics at the level needed to reach the frontiers of the subject.

This new edition of the classic text is the definitive introduction to the field.

?

- A complete revision and update of one of the most cited references in astrophysics
- Provides a comprehensive description of the dynamical structure and evolution of galaxies and other stellar systems
- Serves as both a graduate textbook and a resource for researchers
- Includes 20 color illustrations, 205 figures, and more than 200 problems

- Covers the gravitational N-body problem, hierarchical galaxy formation, galaxy mergers, dark matter, spiral structure, numerical simulations, orbits and chaos, equilibrium and stability of stellar systems, evolution of binary stars and star clusters, and much more
- Companion volume to *Galactic Astronomy*, the definitive book on the phenomenology of galaxies and star clusters

 [Download Galactic Dynamics: Second Edition \(Princeton Serie ...pdf](#)

 [Read Online Galactic Dynamics: Second Edition \(Princeton Ser ...pdf](#)

# Galactic Dynamics: Second Edition (Princeton Series in Astrophysics)

By James Binney, Scott Tremaine

**Galactic Dynamics: Second Edition (Princeton Series in Astrophysics)** By James Binney, Scott Tremaine

Since it was first published in 1987, *Galactic Dynamics* has become the most widely used advanced textbook on the structure and dynamics of galaxies and one of the most cited references in astrophysics. Now, in this extensively revised and updated edition, James Binney and Scott Tremaine describe the dramatic recent advances in this subject, making *Galactic Dynamics* the most authoritative introduction to galactic astrophysics available to advanced undergraduate students, graduate students, and researchers.

Every part of the book has been thoroughly overhauled, and many sections have been completely rewritten. Many new topics are covered, including N-body simulation methods, black holes in stellar systems, linear stability and response theory, and galaxy formation in the cosmological context. Binney and Tremaine, two of the world's leading astrophysicists, use the tools of theoretical physics to describe how galaxies and other stellar systems work, succinctly and lucidly explaining theoretical principles and their applications to observational phenomena. They provide readers with an understanding of stellar dynamics at the level needed to reach the frontiers of the subject.

This new edition of the classic text is the definitive introduction to the field.

?

- A complete revision and update of one of the most cited references in astrophysics
- Provides a comprehensive description of the dynamical structure and evolution of galaxies and other stellar systems
- Serves as both a graduate textbook and a resource for researchers
- Includes 20 color illustrations, 205 figures, and more than 200 problems
- Covers the gravitational N-body problem, hierarchical galaxy formation, galaxy mergers, dark matter, spiral structure, numerical simulations, orbits and chaos, equilibrium and stability of stellar systems, evolution of binary stars and star clusters, and much more
- Companion volume to *Galactic Astronomy*, the definitive book on the phenomenology of galaxies and star clusters

**Galactic Dynamics: Second Edition (Princeton Series in Astrophysics)** By James Binney, Scott Tremaine  
**Bibliography**

- Rank: #163589 in Books

- Brand: imusti
- Published on: 2008-01-27
- Original language: English
- Number of items: 1
- Dimensions: 9.11" h x 1.62" w x 6.23" l, 2.84 pounds
- Binding: Paperback
- 904 pages

 [Download Galactic Dynamics: Second Edition \(Princeton Serie ...pdf](#)

 [Read Online Galactic Dynamics: Second Edition \(Princeton Ser ...pdf](#)

**Download and Read Free Online Galactic Dynamics: Second Edition (Princeton Series in Astrophysics) By James Binney, Scott Tremaine**

---

## **Editorial Review**

Review

**James Binney, Winner of the 2013 Eddington Medal, Royal Astronomical Society**

"All astronomers and dynamicists should acquire and read this impressive book. It is both readable and rigorous: destined to become a classic landmark in the subject."--***Times Higher Education Supplement***

"[T]his book has no peers."--***Nature***

"[The] material is covered with care, rigor, and exemplary clarity; there is nothing obscure, sloppy, or superficial. The authors are, moreover, careful to make clear the limits of present knowledge, and to point out where conclusions cannot yet be drawn. . . . I expect it to stand as a classic reference for many years to come."--**Richard B. Larson, *American Scientist***

"Binney and Tremaine have done a major service to astronomers and physicists alike by producing a magnificent book that will make this fascinating subject much more accessible. This is undoubtedly the best book from which to learn the subject."--**Donald Lynden-Bell, *Physics Today***

"[A]n excellent book--big and fat, and containing everything you ever wanted to know about stellar dynamics. . . . This book must become a landmark in the field."--***New Scientist***

"Do make sure that you are familiar with this volume, for you will not be disappointed. James Binney and Scott Tremaine have done the astronomical community a great service in compiling this second edition. It is a masterpiece."--**Michael Perryman, *Planetary and Space Science***

"[T]his is a great book, already evident from the fact that since its 1st edition nobody has attempted to rival it. It is an absolute must for everybody, from PhD students to senior researchers, whose studies touch upon the subject of galaxy dynamics. A great strength of this book . . . lies in Binney & Tremaine's ability to explain even the most complicated of concepts and arguments in a straightforward and logical way."--**Walter Dehnen, *The Observatory***

"Grab yourself a copy of *Galactic Dynamics* and buckle up lads and lassies. Don't forget the protective head gear and the strong coffee--it's going to be one hell of a rough ride; but hang on there, and together we can boldly go where no man (or woman for that matter) has gone before."--**Gerard Mc Mahon, *Astronomy and Space Magazine***

"The second edition of *Galactic Dynamics* is a successful revision of its 1987 predecessor and will long be a reference for those working on galaxies. Astronomers teaching advanced courses in galactic dynamics will also use it widely, in part because it includes an expanded collection of interesting and demanding problems for teaching and consolidation of the wealth of material presented in the book."--**Ken Freeman, *Physics Today***

From the Back Cover

"Henceforth, one must have a copy of Binney and Tremaine's classic in order to do astrophysics. . . . We will

all study from it and come to know it better than the Bible."--**John N. Bahcall, Institute for Advanced Study**

"I consider *Galactic Dynamics* to be the most important single book published in the field of astronomy in the last ten years. In its subject, it is the most important book published in a generation."--**William Press, Harvard University**

About the Author

**James Binney** is professor of physics at the University of Oxford. His books include *Galactic Astronomy*. **Scott Tremaine** is the Richard Black Professor of Astrophysics at the Institute for Advanced Study and a member of the National Academy of Sciences. Both are fellows of the Royal Society.

## Users Review

From reader reviews:

**Gertrude Knudsen:**

What do you in relation to book? It is not important to you? Or just adding material when you need something to explain what the one you have problem? How about your free time? Or are you busy particular person? If you don't have spare time to try and do others business, it is give you a sense of feeling bored faster. And you have spare time? What did you do? Everybody has many questions above. The doctor has to answer that question due to the fact just their can do that will. It said that about e-book. Book is familiar on every person. Yes, it is correct. Because start from on jardín de infancia until university need this kind of *Galactic Dynamics: Second Edition (Princeton Series in Astrophysics)* to read.

**Donna Dalessio:**

This *Galactic Dynamics: Second Edition (Princeton Series in Astrophysics)* are generally reliable for you who want to be considered a successful person, why. The main reason of this *Galactic Dynamics: Second Edition (Princeton Series in Astrophysics)* can be one of many great books you must have is definitely giving you more than just simple looking at food but feed anyone with information that probably will shock your earlier knowledge. This book is usually handy, you can bring it everywhere you go and whenever your conditions at e-book and printed kinds. Beside that this *Galactic Dynamics: Second Edition (Princeton Series in Astrophysics)* giving you an enormous of experience such as rich vocabulary, giving you demo of critical thinking that we realize it useful in your day action. So , let's have it and enjoy reading.

**Karen Rodriguez:**

Spent a free the perfect time to be fun activity to complete! A lot of people spent their leisure time with their family, or their very own friends. Usually they carrying out activity like watching television, going to beach, or picnic within the park. They actually doing same task every week. Do you feel it? Do you wish to something different to fill your own personal free time/ holiday? Might be reading a book is usually option to fill your cost-free time/ holiday. The first thing that you will ask may be what kinds of reserve that you should read. If you want to test look for book, may be the reserve untitled *Galactic Dynamics: Second Edition (Princeton Series in Astrophysics)* can be excellent book to read. May be it might be best activity to

you.

**Jennifer David:**

It is possible to spend your free time to read this book this book. This Galactic Dynamics: Second Edition (Princeton Series in Astrophysics) is simple to deliver you can read it in the park your car, in the beach, train and soon. If you did not include much space to bring often the printed book, you can buy often the e-book. It is make you better to read it. You can save often the book in your smart phone. Consequently there are a lot of benefits that you will get when you buy this book.

**Download and Read Online Galactic Dynamics: Second Edition  
(Princeton Series in Astrophysics) By James Binney, Scott Tremaine  
#RQ93D4M1WUL**

# **Read Galactic Dynamics: Second Edition (Princeton Series in Astrophysics) By James Binney, Scott Tremaine for online ebook**

Galactic Dynamics: Second Edition (Princeton Series in Astrophysics) By James Binney, Scott Tremaine 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 Galactic Dynamics: Second Edition (Princeton Series in Astrophysics) By James Binney, Scott Tremaine books to read online.

## **Online Galactic Dynamics: Second Edition (Princeton Series in Astrophysics) By James Binney, Scott Tremaine ebook PDF download**

**Galactic Dynamics: Second Edition (Princeton Series in Astrophysics) By James Binney, Scott Tremaine Doc**

**Galactic Dynamics: Second Edition (Princeton Series in Astrophysics) By James Binney, Scott Tremaine Mobipocket**

**Galactic Dynamics: Second Edition (Princeton Series in Astrophysics) By James Binney, Scott Tremaine EPub**

**RQ93D4M1WUL: Galactic Dynamics: Second Edition (Princeton Series in Astrophysics) By James Binney, Scott Tremaine**