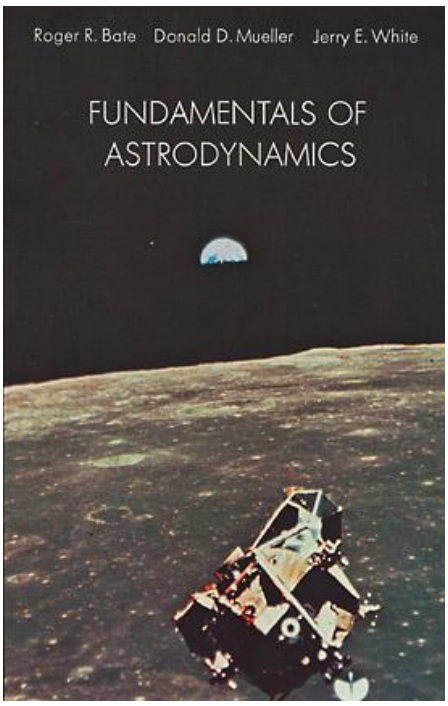

Fundamentals of Astrodynamics

Roger R. Bate , Donald D. Mueller , Jerry E. White

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Fundamentals of Astrodynamics Roger R. Bate , Donald D. Mueller , Jerry E. White
Teaching text developed by U.S. Air Force Academy and designed as a first course emphasizes the universal variable formulation. Develops the basic two-body and *n*-body equations of motion; orbit determination; classical orbital elements, coordinate transformations; differential correction; more. Includes specialized applications to lunar and interplanetary flight, example problems, exercises. 1971 edition.

Fundamentals of Astrodynamics Details

Date	:	Published June 1st 1971 by Dover Publications
ISBN	:	9780486600611
Author	:	Roger R. Bate , Donald D. Mueller , Jerry E. White
Format	:	Paperback 480 pages
Genre	:	Science, Space, Physics, Engineering, Reference, Nonfiction

From Reader Review Fundamentals of Astrodynamics for online ebook

Ghassan Samaha says

I am not into such science but I enjoy showing that “i know Rocket Science”

Gernot Matzenauer says

Very good overview and history of astrophysics / dynamics. The text is from a time when computer editing wasn't around but it doesn't make the book less worthy. To be honest the basic principles haven't changed anyway.

Botch says

What can I say? There is about 400 years worth of science in this book, a book I bought for pocket change. I do, although, recommend taking differential/integral/vector/multivariable calculus before hand. This book pretty much requires a knowledge of those fields. But, if you're familiar with most calculus, I recommend this book 1) for the price and 2) for a quick reference, especially if you're programming these types of forces in a simulation. Online references are always sufficient, of course, but this book has everything laid out in well ordered fashion.

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kislam says

I always wanted to be an astronaut, so I figured I'd start educating myself. Who knows, one day space might open up and become accessible to the private sector; maybe I can find a gig as a flight dynamics officer.

Anways, old but good. This book contains an excellent introduction to the physics, physical environment, and if I recall right, touches on some programming topics for the space environment.

Xavier Shay says

Exactly what it says on the tin. Covers how to calculate orbits, how to put things into orbits, how to transfer orbits, how to get stuff to the moon or other planets. Very math heavy as you'd expect, I skimmed most of it because I was really just after an outline.

Enjoyed the historical notes, i.e. "this is how newton/kepler did it" which I'm always fascinated by.

Probably should have brushed up on my calculus before diving into this.

Tom says

A great book on astrodynamics. I read nd referred to many times in the course of studies. An subsequently re-read. An easy to follow presentation by experienced instructors.

Grady Owens says

The fundamental text on orbital mechanics. If you need your missile to go ballistic or just want to throw something at the moon hard enough to hit it, this is a must-read.

Alex says

This is probably THE book for learning the basics of astrodynamics.

Kevin says

The "BMW" book is pretty much the best basic astrodynamics and orbital mechanics book ever. It works just as well if not better than many current edition textbooks as a reference, and it's way cheaper!

Isscandar says

Lo sto leggendo e non l'ho ancora finito... è molto bello perché spiega gli argomenti in maniera chiara, senza dare per scontato nulla, è richiesta (per lo meno fino a dove sono arrivato) solamente una conoscenza di base di fisica e di analisi matematica.

Le figure non sono "belle" ma sono molto chiare.

Unico difetto, non del contenuto, è che l'aspetto delle formule non è molto bello, non so come dire ma sono un po' storte... una riscrittura in LaTeX sarebbe bellissima.

Adrian says

Quite easy to follow
