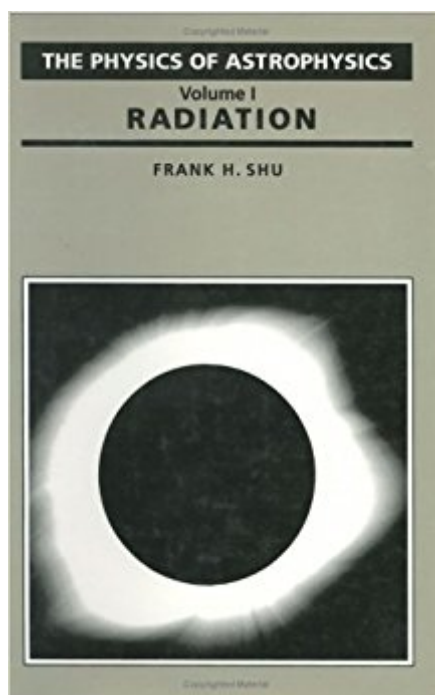


The book was found

# The Physics Of Astrophysics Volume I: Radiation



## Synopsis

This two-volume text is for new graduates on astronomy courses who need to get to grips with the physics involved in the subject. Four problem sets, averaging three problems per set, accompany each volume. The problems expand on the material covered in the texts and represent the level of calculational skill needed to write scientific papers in contemporary astrophysics. Volume I.

"Radiation" deals with the emission, absorption, and scattering of radiation by matter, radiative transfer, statistical physics, classical electrodynamics, and atomic and molecular structure. Volume II. "Gas Dynamics", is a self-contained textbook. It can be used as the text for a one semester course on the interactions of matter and radiation and electromagnetic fields of macroscopic scale in both the strongly collisional and collisionless regimes. It covers single-fluid shocks, and fronts; magnetohydrodynamics and plasma physics, their applications to self-gravitating spherical masses, accretion disks, spiral density waves, star formation, and dynamo theory. Over 200 photos, line drawings, and tables amplify the major points of the text.

## Book Information

Hardcover: 429 pages

Publisher: University Science Books (June 1, 1991)

Language: English

ISBN-10: 0935702644

ISBN-13: 978-0935702644

Product Dimensions: 9.6 x 6.3 x 1 inches

Shipping Weight: 1.6 pounds (View shipping rates and policies)

Average Customer Review: Be the first to review this item

Best Sellers Rank: #922,698 in Books (See Top 100 in Books) #27 in [Books > Engineering & Transportation > Engineering > Aerospace > Gas Dynamics](#) #974 in [Books > Textbooks > Science & Mathematics > Astronomy & Astrophysics](#) #1249 in [Books > Science & Math > Astronomy & Space Science > Astrophysics & Space Science](#)

## Customer Reviews

Students who opt to follow this pair of excellent texts are going to equip themselves with a strong background in the physics of astrophysics, and receive a compelling invitation to use this new-found knowledge to explore the many exciting areas of modern astronomy. --Nature --This text refers to the Paperback edition.

Frank Shu is a Professor of Astronomy at the University of California, Berkeley. He received his PhD from Harvard University in 1968. Shu has written a number of expository articles for the lay public, and is the author of a best-selling introductory textbook in astronomy and astrophysics, *The Physical Universe*. He is a member of the U.S. National Academy of Sciences and Academia Sinica.

[Download to continue reading...](#)

The Physics of Astrophysics Volume I: Radiation Principles of Astrophysics: Using Gravity and Stellar Physics to Explore the Cosmos (Undergraduate Lecture Notes in Physics) Gas Dynamics (The Physics of Astrophysics) High-Energy-Density Physics: Fundamentals, Inertial Fusion, and Experimental Astrophysics (Shock Wave and High Pressure Phenomena) Dictionary of Geophysics, Astrophysics, and Astronomy (Comprehensive Dictionary of Physics) Physics of the Interstellar and Intergalactic Medium (Princeton Series in Astrophysics) An Introduction to Observational Astrophysics (Undergraduate Lecture Notes in Physics) Fundamentals of Neutrino Physics and Astrophysics Atomic and Molecular Radiation Physics (Wiley Monographs on Chemical Physics) Radiation Nation: Fallout of Modern Technology - Your Complete Guide to EMF Protection & Safety: The Proven Health Risks of Electromagnetic Radiation (EMF) & What to Do Protect Yourself & Family Atoms, Radiation, and Radiation Protection Atoms, Radiation, and Radiation Protection, 2nd Edition Treatment Planning in the Radiation Therapy of Cancer (Frontiers of Radiation Therapy and Oncology, Vol. 21) (v. 21) Physics for Scientists and Engineers with Modern Physics: Volume II (3rd Edition) (Physics for Scientists & Engineers) The Feynman Lectures on Physics, Vol. I: The New Millennium Edition: Mainly Mechanics, Radiation, and Heat: Volume 1 Astrophysics for People in a Hurry Detection of Light: From the Ultraviolet to the Submillimeter (Cambridge Astrophysics) The Design and Construction of Large Optical Telescopes (Astronomy and Astrophysics Library) An Introduction to Modern Astrophysics (2nd Edition) Foundations of Astrophysics

[Contact Us](#)

[DMCA](#)

[Privacy](#)

[FAQ & Help](#)