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This new edition has been completely rewritten, consolidating the previous editions into one volume. It covers the most recent discoveries in areas such as gamma-ray bursts, ultra-high energy cosmic rays and ultra-high energy gamma rays. The topics have been rearranged and streamlined to make them more applicable to a wide range of different astrophysical problems.

Building on the concepts and techniques taught in standard undergraduate courses, this textbook provides the astronomical and astrophysical background for students to explore more advanced topics. Special emphasis is given to the underlying physical principles of high energy astrophysics, helping students to understand the essential physics.

"The third edition of *High Energy Astrophysics* is a remarkable gem. It is written in the clear, lucid style that characterises Professor Longair's monographs and displays an admirable balance between breadth and depth. It would serve equally well as a textbook for a graduate-level course or a reference work for the practicing astrophysicist."

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The Ohio State University*

"This is a great book for students and researchers alike. It is up to date and covers the exciting new developments in high energy astrophysics. It will be on my shelf at arm's reach."

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"The text conveys the excitement of the progress being made in both observational and computational astronomy and ably describes the physical processes involved before educating the reader on a comprehensive list of frontier research topics. The new edition is an essential purchase for all physicists and astronomers."

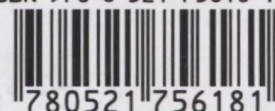
*Richard Ellis, Steele Professor of Astronomy, California Institute of Technology*

"The book is really a treasure for any student or teacher interested in astrophysics. It is very up to date and synoptically covers the whole field of high energy astrophysics. I will use the book for my lectures as soon as I can!"

*Günther Hasinger, Scientific Director, Max-Planck-Institut für Plasmaphysik*

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