teresting chapters on development, stress responses, and other subjects.

But with regard to making explicit any unique relationship between the limbic and autonomic nervous systems, there is what almost appears to be a conspiracy of silence. Only in the contribution by Cohen is any evidence presented that limbic rather than other parts of the forebrain are involved in autonomic regulation. And Cohen's research is limited to pigeons. All the other chapters that deal with forebrain control of autonomic responses include references to influences initiated from the lateral cortical convexity (especially precentral and anterior frontal).

Does this mean that DiCara's conception of the volume is inappropriate? Perhaps, but there remains the nagging conviction that the editor has some intuition which, if it could only be made explicit, would illuminate a considerable range of brain-behavior relationships. *Limbic and Autonomic Nervous Systems Research* can be an invaluable source in the search for this illumination.

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Cosmology

Black Holes, Gravitational Waves and Cosmology. An Introduction to Current Research. MARTIN REES, REMO RUFFINI, and JOHN ARCHIBALD WHEELER. Gordon and Breach, New York, 1974. xvi, 332 pp., illus., + appendix. $29.50. Topics in Astrophysics and Space Physics, vol. 10.

In the rapidly developing field of relativistic astrophysics and cosmology the existing books have been comprehensive treatises, generally emphasizing one aspect of the subject or another and demanding of the reader a fairly high level of technical proficiency. This book makes the basic concepts of the whole field accessible to the advanced undergraduate or beginning graduate student. It could be used on its own at this level or serve as an introduction or supplement to one of the more advanced books.

The first ten chapters are based on "Relativistic Cosmology and Space Platforms," a European Space Research Organization report by Ruffini and Wheeler dealing with relativistic stars, pulsars, supernovae, black holes, quasars, gravitational waves, and tests of gravitation theories. The remaining nine chapters describe modern cosmology, both observational and theoretical, ending with Wheeler's speculative ideas on the reprocessing of the universe.

The book is very well written. The prose is both readable and concise. Generally, the authors introduce a new concept or result by way of something already familiar to the reader (a Newtonian analog or a dimensional argument, for example), give a simple derivation where possible, and give extensive references should one wish to go deeper into the topic.

Many books of this kind are marred by numerous errors in the text. This one is relatively error-free. (Two that I noticed: gravitational radiation emission *decreases*, not increases as is stated, the period of a binary system, and the equations of stellar structure quoted for the Brans-Dicke theory are incorrect.)

In any rapidly developing field a book may be largely out of date by the time it is completed. Here this problem has been minimized through emphasis on basic physical ideas rather than on particular model-dependent conclusions. However, the authors felt it necessary to add a selection of reprints on black holes and gravitational waves in an attempt to update that part of the book. This decision is my only grounds for major criticism of the book: the book succeeds because it distills each topic and presents it in a manner that makes it easy to understand. The journal articles by their very nature are out of place in a book of this kind, and their omission would have reduced the length of the book, (and perhaps the price too) by over 20 percent.

Not only is this book suitable as a textbook for students, many working astrophysicists will find it a useful book to own.

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Books Received

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