editing this book was the fact that the discussion following the presented papers is mostly a direct transcription of the taped recordings. This is convenient for the readers because the discussion is not presented in a boring way, but with wit and individuality of those taking part in the discussion as well as those presiding over it.

Here, only some of the communications can be mentioned in general. Several examples of star clusters are given as touchstones for theories of galactic evolution. Attention is devoted to problems of distance and chemical composition of the Hyades cluster and to the chemical composition of the galactic disc. Discussion of open clusters involves mainly problems of the dynamics, formation, and their ages. Problems common to open and globular clusters are discussed, mainly those of binary stars in clusters and the characteristics in Magellanic Clouds. For globular clusters one emphasizes the problem of their system in galaxies, questions of chemical properties, the formation, dynamics, their evolution and ages and the problem of variable stars.

The book has name and subject indexes and a very valuable index of all objects discussed.

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J. Ruprecht


This book is the proceedings of a symposium held in Los Angeles in August 1979 and it contains texts of almost fifty papers. Most but not all of the participants believed that high redshifts are cosmological in origin and that the objects showing them provide crucial information about the early history of the Universe. The book is in part a summary of what is already known but to a considerable extent it also looks forward to the advances in knowledge which can be expected in the near future through the use of detectors such as CCD’s, fast automatic platemearing machines and new telescopes, such as the Space Telescope. It also demonstrates that useful cosmological information can now be obtained in all parts of the electromagnetic spectrum. Because most of the articles are short, the volume will be more useful to scientists who already know something of the subject, than to complete newcomers.

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R. J. Tayler

D. F. Gray and J. L. Linsky (eds), Stellar Turbulence, IAU Colloquium No. 51, Volume 114 of Lecture Notes in Physics, 97 figures, 8 tables, ix+308 pp.; Soft cover DM 37,50 (US $ 22.20), Springer-Verlag, Berlin, 1980

Colloquium 51 of the IAU was held at the University of Western Ontario (Canada) on August 27–30, 1979. These proceedings, printed in photo-offset from camera-ready manuscripts contain 18 papers printed in full, and the abstracts of 30 more papers. The main headings of the four sections of the book are ‘The Physical Origin of Turbulence’, ‘Observed Properties of Stellar Turbulence’, ‘Conceptualizations of Turbulence’ and ‘Some Effects of Stellar Turbulence’. Besides, there is a brief concluding summary by E. Böhmi-Vitense.

The review papers give a good overview of the state of the art of stellar turbulence as it was in 1979. The organizers of the colloquium have emphasized the relations and interactions between solar and stellar research on turbulence, which yields fruitful results. The abstracts, mostly of only one-half to one-fourth page length, are as a rule too short for really being useful. The book is well produced.

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