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John E. Beckman and Lucio Crivellari, *Progress in Stellar Spectral Line Formation Theory*, D. Reidel Publ. Co., Dordrecht, Holland, 1985, xvi + 448 pp., including subject index, NATO ASI Series, Series C: Mathematical and Physical Sciences, Vol. 152, Hardbound Dfl. 165, - / US\$59, - / £45.75.

This book contains the proceedings of the NATO Advanced Research Workshop on Progress in Stellar Spectral Line Formation Theory, held at Trieste September 4–7 1984. This is a valuable report, giving a quite complete survey of current problems and methodology in stellar-atmosphere radiative transfer. It contains 30 contributions grouped in three subjects: (1) Frequency redistribution problems; (2) Methods in line radiative transfer; (3) Observational aspects of line formation in stellar atmospheres and in the laboratory. An appendix specifies radiative transfer computer codes available from various specialists.

The book belongs in every astrophysics library, and on the desk of every radiative transfer specialist.

Sonnenborgh Observatory at Utrecht

ROBERT J. RUTTEN

F. K. Brunner (ed.), Geodetic Refraction, Effects of Electromagnetic Wave Propagation Through the Atmosphere, Springer-Verlag, Berlin, 1984, 220 pp., DM 48,-.

The book contains ten invited papers presented at the symposium Advance in Geodetic Refraction of the International Geodetic Association (Tokyo 1982) giving an extensive survey of the state of art about the modelling and the elimination of atmospheric effects on geodetic and astronomic measurements using electromagnetic waves. The papers are written by internationally recognized specialists. Some of the papers are very thorough and clear, some are quite short and some are difficult and compressed. Many of the papers include an extensive list of relevant references.

The book is important for postgraduate geodesists who have already some knowledge about refractional problems and for other professionals who are highly interested problems.

Technical University at Delft

J. C. DE MUNCK

W. H. Christiansen and J. A. Högbom, *Radiotelescopes*, Cambridge Monographs on Physics, Cambridge University Press, Cambridge, 1985, 256 pp., £30.00 / \$59.50.

This book gives a thorough review of the fundamentals of radio telescopes as image collecting instruments and the principles of the image formation procedures. The present

Space Science Reviews 43 (1986).