The next chapter discusses observations from outside the earth's atmosphere in the ultraviolet and x-ray parts of the spectrum. I found especially interesting the effect of Doppler shift on the pulsation period of the x-ray component of a binary system. This gives a velocity curve, just like that resulting from optical radial velocity observations of the visible component. Putting both of them together gives the stellar masses.

Special groups of binary stars are described next. These include the RS CVns, the Wolf-Rayets, novae and dwarf novae, symbiotic stars, central stars in planetary nebulae, and stars (like VV Cep) with atmospheric eclipses. I found the authors' distinction between classification based on light-curve and based on type of system very helpful. Thus, a binary can have an Algol-like light-curve (minimal light changes outside of eclipse), without being an Algol-type system (near main-sequence star of early spectral type, accompanied by an evolved star of later spectral type).

The last chapter deals with individual stars of special interest: Algol, β Lyrae, U Cep, R CMa, and ε Aur. Fans of these particular systems will appreciate this chapter.

The book has 800 entries in its excellent bibliography. It has a short general-study and a star-name index. This latter has 171 entries, including variable star names, x-ray designations, nova names, and designation in the HD and HR catalogs.

This book nicely complements A. Batten's book, Binary and Multiple Systems of Stars, which appeared in the same series in 1973. It is written on a less technical level than V. P. Tsesevich's Eclipsing Variable Stars, also of 1973, which was reviewed in volume 3, number 2 of this journal. The back cover recommends Sahade and Wood's book for astronomers who are not binary star specialists and to amateur astronomers, and this reviewer heartily concurs.

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BOOK REVIEW

PROJECTS AND DEMONSTRATIONS IN ASTRONOMY

Donald Tatersfield, John Wiley & Sons, New York, 1979, 331 pages; $27.50.

This book is just what the title implies. However, a good mathematical knowledge and substantial knowledge of astronomy are required. There are 61 projects for you to solve, varying from orbital motion, celestial sphere, planets, sun, astronomical instruments, stars, galaxies and telescopes. Graphic solutions are included in the Appendix. Symbol references in the text are not noted on the diagrams and certain reference symbols in the text are different in the diagrams. However, the advanced student will find much of interest.

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