REVIEW OF PUBLICATIONS

Theoretical Astrophysics edited by V. A. Ambartsumyan. Pages x plus 654; 9 × 6 in. New York and London, Pergamon Press Inc., 1958. Price $22.50.

This book is a translation by J. B. Sykes of a basic Russian graduate-level textbook in theoretical astrophysics. The work is in nine parts; the first three deal with stellar atmospheres; part IV with planetary nebulae; part V, novae; part VI, emission line stars; part VII, internal structure of stars; part VIII, scattering in planetary atmospheres and part IX, with interstellar material. The authors are prominent Soviet astrophysicists and the complete volume is edited by the most eminent of them, V. A. Ambartsumyan. The Russian edition of this text was published in 1952 but the text has been revised to make essential changes resulting from research done up to 1956.

The standard of the work is similar to that of the western textbooks at the beginning graduate level. It is particularly strong in the field of stellar atmospheres (both normal and extended) where the physical ideas are made clear by good explanatory writing with a minimum of formal development which make it a good introduction to this field.

The section on interstellar material and particularly that on the internal constitution of stars are less satisfactory. Both ignore fundamental post-war western contributions to their subjects and these have been so important that large parts of these chapters are completely outdated.

The book is well produced but at $22.50 it can be doubted if this English translation will be accessible to more than a few of those who would find it most useful. One wonders if the same situation obtains in the Soviet Union!

LEONARD SEARLE

Introduction to the Mechanics of Stellar Systems by Rudolf Kurth. Pages 174; 8½ × 5¼ in. London, New York and Paris, Pergamon Press, 1957. Price $9.00.

Books on stellar dynamics are few, and this work "intended to serve as an introduction for more advanced students", to use the words of the author, will be welcome.

Chapter I outlines our knowledge of galactic structure, the concept of a stellar system, and the related observational data. In the following two