Book Review

J. Yvon: **Correlations and Entropy in Classical Statistical Mechanics,** Pergamon Press Ltd., 1969, XX + 183 pp., price 60 sh./$8.00.

This monograph is a translation of the original French edition which appeared in 1966 under the title Les Corrélations et l'Entropie en Mécanique Statistique Classique. A large part of the material in this monograph is based on lectures given by the author to the students of the Third Cycle of the Paris-Orsay Faculty of Science.

As the title suggests, the monograph discusses the application of classical statistical mechanics to problems of entropy together with a description of correlations connected with the approximation methods of statistical mechanics. The monograph consists of nine chapters and the headings of the chapters are: Probability densities and their evolution, Occupation, Statistical entropy, Canonical laws of thermodynamic equilibrium, Thermal equilibrium: System of identical point molecules, Fine structure in thermal equilibrium, Phase changes, Thermal waves in fluids and Entropy and heat. The monograph is concluded with a list of references, exercises and an index. The exercises will enable the student to test his understanding of the subject.

The treatment of the subject is concise and clear. The author has succeeded in discussing "the ideas which seem to him the most satisfactory". The style of the language in the monograph is excellent and the credit must be due to the translator H.S.H. Massey. In conclusion this monograph should be very useful and instructive for the undergraduate students of Physics in particular and the graduate students of Physics and Mathematics in general. This monograph (Vol. 21) is a valuable addition to the already existing International Series of Monographs in Natural Philosophy.

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