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that no signal or energy of any form could propagate through a medium with a velocity greater than that of light. It led Sommerfeld to study the problem of propagation of signals (waves) in a dispersive and absorbing medium. His results were further extended by the author. These fundamental papers are presented in Chapters 2 and 3, respectively. The conclusions drawn from their analysis is that the signal and not the group velocity (contrary to previously held notions) plays the basic role, when a wave or signal propagates in a dispersive medium, and Einstein's statement is not violated even within the absorption band of the medium in question.

The following chapter contains a general discussion of propagation of electromagnetic waves in a dispersive medium without regard to its specific properties. Expressions for the group, signal, and energy transport are derived, including a treatment of the so-called "fore-runners" by the application of the method of stationary phase for a medium with no absorption. The author then examines the problem for the case of a medium of low density (gas) possessing several absorption bands. The final chapter gives a short account of waves in waveguides.

The author is to be congratulated for bringing forth in book form these interesting and important contributions on wave propagation in dispersive media. They should be of interest not only to the research scientists and engineers, students and teachers, but also to applied mathematicians who make substantial contributions toward the solutions of more complex problems of both theoretical and practical importance.

The Theory of Thin Elastic Shells. IUTAM Symp. Proc. (Delft, Aug. 1959). Edited by W. T. Koiter. 496 pp. (North-Holland, Amsterdam) Interscience Publishers, Inc., New York, 1960. \$9.00. Reviewed by Ellis H. Dill, University of Washington.

A GROUP of individuals interested in the mathematical theory of shells gathered in the Netherlands for a few days in August, 1959. The meeting was open only to the invited speakers and invited spectators. This book presents the text of the invited lectures. There are three papers on the general theory, ten on the stability of spheres, cylinders, and cones, six on bending stresses in shells of various shapes, two on membrane theory, and two on the geometrically non-linear problem for shallow shells and cylindrical shells. Most of the papers are in English, but five are written in German and one in French.

Most of the lecturers have previously made substantial original contributions in the theory of shells; these papers represent their latest contributions to the subject and are therefore of immense interest to the research worker. Some numerical results, useful to the designer, are given for buckling of cylinders under lateral pressure and axial load, radially stiffened spherical caps, ring stiffened cylinders under lateral pressure, and conical shells under lateral pressure.