

waves, there is a very readable presentation of the theory as applied to hyperbolic systems. Applications to a broad variety of phenomena, including the standard cases of traffic flow, gas dynamics, and shallow-water waves, are delineated. It is in the study of dispersive waves that there has been intense activity in the past few years. Much of this activity has been prompted by Whitham's own research on finite amplitude periodic wave trains and the use of variational methods. The second part of the book also includes a discussion of the elegant methods used for some equations of special interest (in particular Korteweg-de Vries and Sine-Gordon) that can be solved by making use of results from inverse scattering theory.

Many of the significant developments in the study of nonlinear waves have occurred within the past ten years and have immediate implications in a variety of disciplines. It is especially appropriate to have a researcher who has originated many of these new developments survey the field at this time.

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