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Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di contenuto	Approximate solution of the generalized Riemann problem and applications -- Computation of oscillatory solutions to partial differential equations -- Preliminary results on the extension of eno schemes to two-dimensional problems -- Upwind differencing schemes for hyperbolic conservation laws with source terms -- The entropy dissipation by numerical viscosity in nonlinear conservative difference schemes -- 2-D and 3-D Euler computations with finite element methods in aerodynamics -- A "box-scheme" for the euler equations -- Numerical techniques in elastoplasticity -- An implicit centered scheme which gives non-oscillatory steady shocks -- A computer-aided system for investigation and construction of difference schemes of gas dynamics -- Lois de conservation et integrales d'energie des equations hyperboliques -- On symmetrizing hyperbolic differential equations -- A survey of nonstrictly hyperbolic conservation laws -- Admissibility criteria for phase boundaries -- The transformation from Eulerian to Lagrangian coordinates for solutions with discontinuities -- Two existence theorems for systems of conservation laws with dissipation -- Global solutions to some free boundary problems for quasilinear hyperbolic systems and applications -- Un theoreme d'existence globale en elasticite non lineaire mono-dimensionnelle -- A nonhomogeneous system of equations of nonisentropic gas dynamics -- Far field boundary conditions for steady

state solutions to hyperbolic systems -- Can hyperbolic systems of conservation laws be well-posed in $BV(\mathbb{R}; \mathbb{R}^N)$? -- Propagation des oscillations dans les systemes hyperboliques non lineaires -- Stability and decay in systems of conservation laws -- Different approach for the relation between the kinetic and the macroscopic equations -- Integrable transport processes.

Sommario/riassunto

The field of nonlinear hyperbolic problems has been expanding very fast over the past few years, and has applications - actual and potential - in aerodynamics, multifluid flows, combustion, detonics amongst other. The difficulties that arise in application are of theoretical as well as numerical nature. In fact, the papers in this volume of proceedings deal to a greater extent with theoretical problems emerging in the resolution of nonlinear hyperbolic systems than with numerical methods. The volume provides an excellent up-to-date review of the current research trends in this area.
