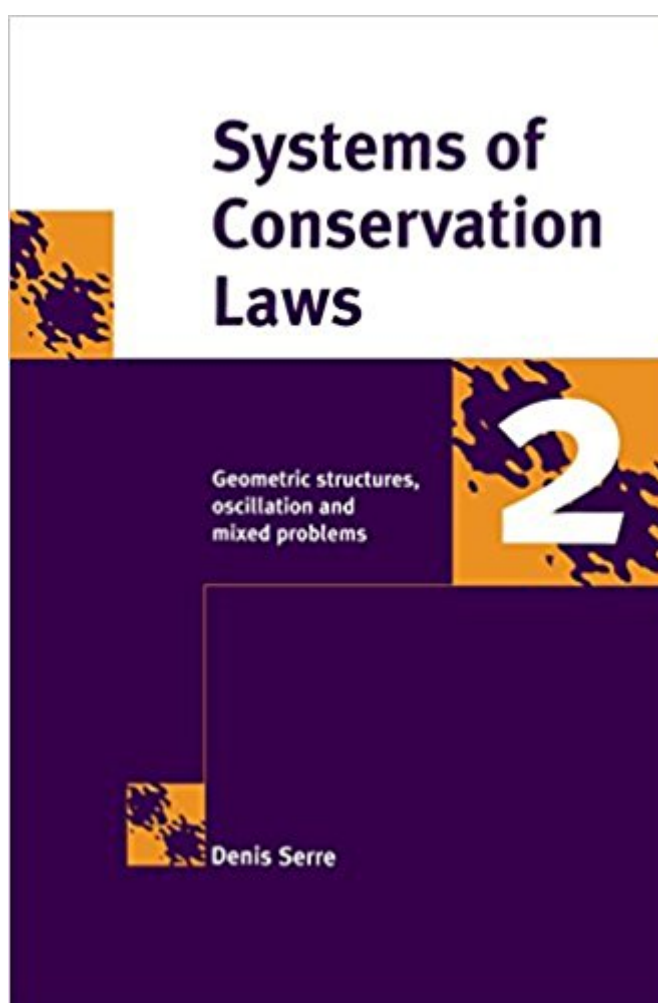The book was found

Systems Of Conservation Laws 2: Geometric Structures, Oscillations, And Initial-Boundary Value Problems

Synopsis

Systems of conservation laws arise naturally in physics and chemistry. Continuing where the previous volume left off, the author considers the maximum principle from the viewpoints of both viscous approximation and numerical schemes. Convergence is studied through compensated compactness. The author applies this tool to the description of large amplitude wave propagation. Small waves are studied through geometrical optics. Special structures are presented in chapters on rich and Temple systems. Finally, Serre explains why the initial-boundary value problem is far from trivial, with descriptions of the Kreiss-Lopatinski condition for well-posedness, with applications to shock wave stability, and certain problems in boundary layer theory. Throughout the presentation is reasonably self-contained, with large numbers of exercises and full discussion of all the ideas. This will make it ideal as a text for graduate courses in the area of partial differential equations.

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Systems of conservation laws arise naturally in physics and chemistry. Following on from the previous volume, Serre looks at more advanced topics, e.g. the maximum principle and geometrical ideas, and studies in detail their application to shock wave stability, and certain problems in

boundary layer theory.Throughout the presentation is reasonably self-contained, with large numbers of exercises and full discussion of all the ideas. This will make it ideal as a text for graduate courses in the area of partial differential equations.

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