

CONSERVATION LAWS AND SHOCK WAVES

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ABSTRACT. The study of continuum physics gave birth to the theory of quasi-linear systems in divergence form, commonly called conservation laws. In this talk, conservation laws, the Euler equations, and the definition of the corresponding weak solutions will be introduced first. Then a short history of the studying of conservation laws and shock waves will be given. Finally I would like to present one of our current research projects, that is on the mathematical analysis of shock diffraction by convex cornered wedges.