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"Hyperbolic Conservation Laws"

Abstract: The classical existence theory of James Glimm for hyperbolic conservation laws is slightly over 30 years old. There have been the work of Glimm-Lax and of Ron DiPerna on the qualitative behaviour of solutions. Recently, there are important progresses on the well-posedness problem. This talk will survey the historical developments of the shock wave theory for hyperbolic conservation laws. New ideas on the entropy production and the suitable topology for solution space will also be presented.