Some Problems in The Theory of Multi-Dimensional Shock Waves

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In this talk, I will discuss some perspectives and recent progress in the theory of Multi-dimensional shock waves for nonlinear systems of conservation laws. In particular, I will discuss some challenges we are facing in dealing with the theory of multi-dimensional conservations laws, shock waves and some pro-type problems which are of great importance in theory, computations and applications. We will survey the progress on problems such as supersonic flows past solid bodies transonic flows in a nozzle, and shock reflection problems, etc..

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