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# Criteria on contraction of admissible discontinuities for the systems of conservation laws

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## Abstract

In this talk, we present criteria on contraction of admissible discontinuities for the systems of conservation laws in the spatially inhomogeneous pseudo-distance. We first generalize the criterion developed by Serre and Vasseur, which can be applied to the contraction for the extremal shocks of the physical systems including the Euler systems. Moreover, we present a necessary condition for the contraction of admissible discontinuities. Considering the negation of the necessary condition, we construct two kinds of criteria to identify the invalidity of contraction of intermediate entropic shocks and contact discontinuities. This is joint work with Alexis Vasseur.

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