COMPUTATION FOR NONCONVEX CONSERVATION LAWS.

Myoung Kwon Kim [1] , Suyeon Shin [1] and Woonjae Hwang [2]

1) *Department of Mathematics, Korea University, Seoul 136-701, KOREA*

2) *Department of Information and Mathematics, Korea University, Sejong 339-700, KOREA*

Corresponding Author : Woonjae Hwang, woonjae@korea.ac.kr

ABSTRACT

Non-convex conservation laws generate complicated solution structures, called a composite wave. The composite wave consists of a sequence of shocks and rarefaction waves and numerical approximation may not converge to entropy solution. We compute with the dissipative second-order minmod reconstruction to the entropy solution and present a number of numerical examples that demonstrate the convergence of the solutions, especially for 2-D Riemann problem.

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