The numerical Study of Euler system with maximal density constraint

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ABSTRACT

In this study, we consider the Euler system with a singular pressure which encodes a maximal density constraint. This problem is a two-phase model between incompressible regions, where the maximal density is reached, and compressible regions for lower density. A parameter $\epsilon$ is introduced to control the stiffness of this maximal density constraint. We solve the Euler system for several domains which change with the maximal density.

REFERENCES