GENERALIZED TIME–PERIODIC SOLUTIONS TO THE EULER EQUATIONS OF COMPRESSIBLE FLUIDS

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Abstract. We introduce a notion of generalized time-periodic solutions to first-order hyperbolic systems in one space dimension and we establish the existence of such solutions to the Euler equations of compressible fluid dynamics for a large class of equations of state.


Keywords and phrases: nonlinear hyperbolic equation, Euler equations, periodic solution, fixed-point theorem.

REFERENCES


