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Energy analysis and discretization of nonlinear impedance boundary conditions for the time-domain linearized Euler equations

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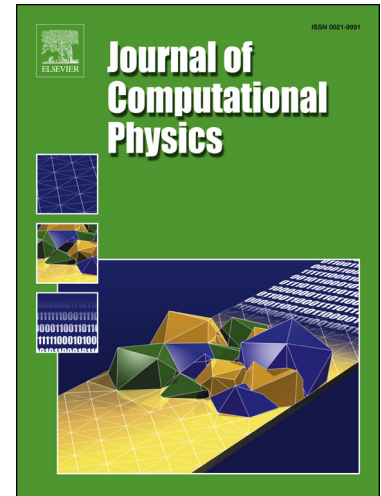
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Highlights

- Admissibility of impedance boundary conditions is rigorously defined.
- TDIBCs are shown to be best enforced through the scattering operator.
- Validation of the analysis in a nonlinear impedance tube.
- TDIBCs are deduced from the oscillatory-diffusive representation of physical models.
- Application to two linear flow ducts.

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