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A high-order density-based finite volume method for the computation of all-speed flows

Xesús Nogueira, Luis Ramírez, Sofiane Khelladi, Jean-Camille Chassaing,
Ignasi Colominas

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Highlights (for review)

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- A high-order density-based finite-volume framework for all-speed flows is presented
- High-order Roe and Rusanov finite volume schemes for all speed flow are developed.
- MLS-based shock wave sensor prevents unnecessarily activation of the slope limiter.
- This avoids the presence of spurious pressure oscillations in low-Mach regions.

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