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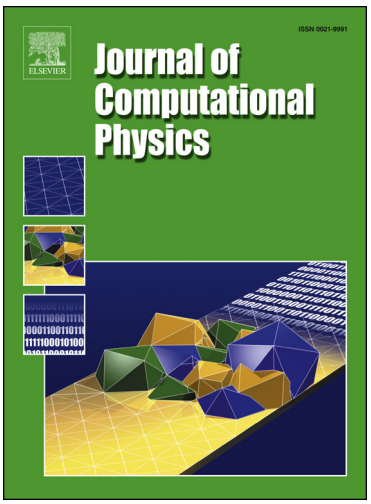

High fidelity discontinuity-resolving reconstruction for compressible multiphase flows with moving interfaces

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Highlights

- A novel paradigm of spatial reconstruction for compressible multi-phase flows with free interfaces.
- Consistency among volume fraction and physical variables across moving material interfaces.
- Well resolved moving interface free from numerical dissipation and smearing.
- Algorithmic simplicity, computational efficiency and practical significance.
- Superior numerical results for wide range benchmark tests to other existing methods.

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