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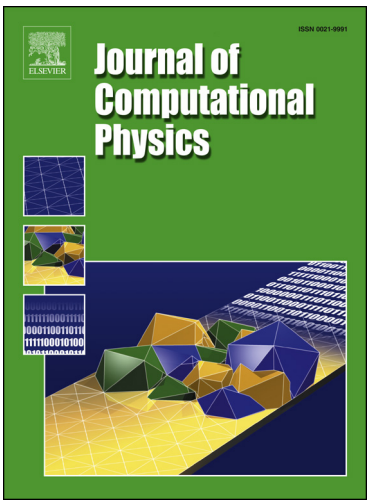

An adaptive multi-moment FVM approach for incompressible flows

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Highlights

- It is the first endeavor to extend multi-moment FVM to AMR for incompressible flows.
- A conservative prolongation scheme motivated by CIP interpolation is proposed.
- An efficient method for solving Poisson equation on adaptive meshes is developed.
- IB approach is used for simulating moderate Reynolds numbers incompressible flows.

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