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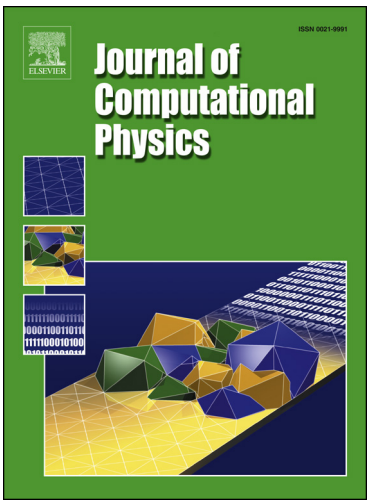

A third-order gas-kinetic CPR method for the Euler and Navier–Stokes equations on triangular meshes

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Highlights

- A new scheme on triangular meshes is developed based on the CPR framework and gas-kinetic flux solver.
- The inviscid and viscous fluxes are coupled and computed uniformly.
- The point-wise fluxes are obtained simultaneously by constructing a multidimensional formulation.
- It can achieve third-order accuracy in both space and time within a single time step.
- It shows high efficiency compared with the traditional CPR in compressible viscous flows.