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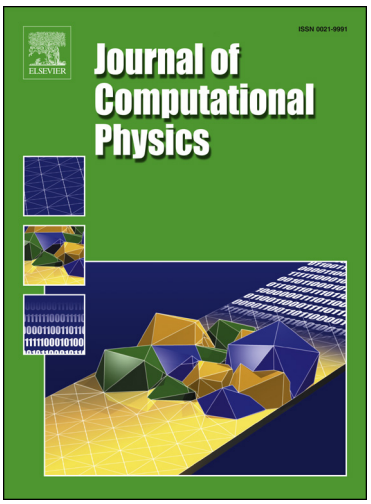

Robust and efficient discontinuous Galerkin methods for under-resolved turbulent incompressible flows

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Highlights

- Robust DG discretization for under-resolved turbulent incompressible flows.
- Stabilization based on divergence and continuity penalty terms is robust and accurate.
- Scheme motivated by energy arguments and analogy to divergence-free Hdiv elements.
- Generic (parameter free) DG solver competitive in accuracy to state-of-the-art LES.
- Simulation with 3.7e9 DoFs demonstrates HPC capability of presented LES solver.