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Higher-order temporal integration for the incompressible Navier–Stokes equations in bounded domains

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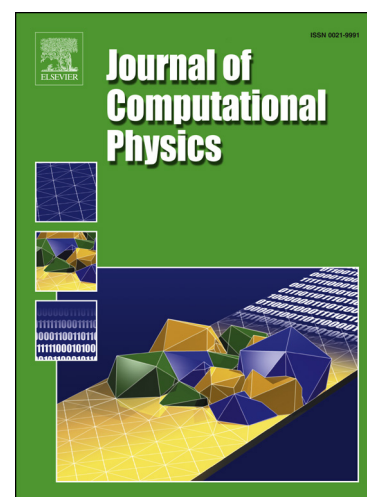
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Highlights

- Development of high-order accurate, semi-implicit temporal integration methods for the incompressible Navier–Stokes equations.
- Comparison between primary variable, gauge, and auxiliary variable formulations.
- Design of a single-step, spectral deferred pressure correction scheme with arbitrary formal order of accuracy.
- Numerical tests demonstrating schemes of up to eighth-order accuracy in square and curved domains.
- Discussion of order reduction owing to time-dependent boundary conditions and in gauge formulations.

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