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A scalable geometric multigrid solver for nonsymmetric elliptic systems with application to variable-density flows

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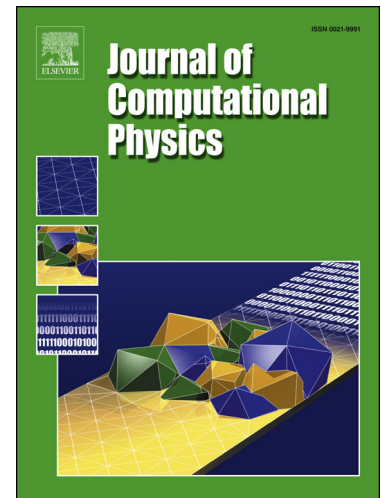
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Highlights

- The independence of the convergence rate from the size of the system is shown for uniform and nonuniform grids.
- The robustness of our method to large and sharp density variations is shown, demonstrating its applicability to two-phase flow problems.
- Strong and weak scaling results show scalability of our implementation up to tens of thousands of processors.

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