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An improved projection method

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## Highlights

- An improved projection method of imposing boundary conditions is presented.
- Treats the case when initial and boundary data are inconsistent.
- Comparisons to the well-known SAT method of imposing boundary conditions.
- SAT yields much larger spectral radii, compared to the improved projection method.
  Computations of 1D and 2D problems corroborate the stability and accuracy behavior.

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