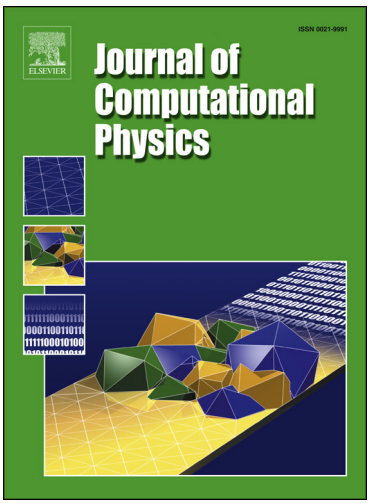
Accepted Manuscript



Time-Stable Overset Grid Method for Hyperbolic Problems using Summation-by-Parts Operators

Nek Sharan, Carlos Pantano, Daniel J. Bodony

PII: S0021-9991(18)30059-7
DOI: https://doi.org/10.1016/j.jcp.2018.01.049
Reference: YJCPH 7833

To appear in: *Journal of Computational Physics*

Received date: 9 October 2017
Revised date: 25 January 2018
Accepted date: 27 January 2018

Please cite this article in press as: N. Sharan et al., Time-Stable Overset Grid Method for Hyperbolic Problems using Summation-by-Parts Operators, *J. Comput. Phys.* (2018), https://doi.org/10.1016/j.jcp.2018.01.049

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

Highlights

- Provably-stable overset mesh method for hyperbolic problems is proposed.
- Energy stability methods using summation-by-parts and simultaneous-approximation-term are used.
- SBP-SAT-based overset method does not require ad hoc artifical damping methods for numerical stability.

Download English Version:

https://daneshyari.com/en/article/6929012

Download Persian Version:

https://daneshyari.com/article/6929012

Daneshyari.com