

Accepted Manuscript

A quadrature simplification method for fast implicit discontinuous Galerkin schemes

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PII: S0045-7930(18)30139-7
DOI: [10.1016/j.compfluid.2018.03.035](https://doi.org/10.1016/j.compfluid.2018.03.035)
Reference: CAF 3796



To appear in: *Computers and Fluids*

Received date: 2 March 2017
Revised date: 28 January 2018
Accepted date: 9 March 2018

Please cite this article as: Hiroyuki Asada, Soshi Kawai, Keisuke Sawada, A quadrature simplification method for fast implicit discontinuous Galerkin schemes, *Computers and Fluids* (2018), doi: [10.1016/j.compfluid.2018.03.035](https://doi.org/10.1016/j.compfluid.2018.03.035)

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Highlights

- A quadrature simplification method for fast implicit DG schemes is proposed.
- The proposed method utilizes the orthogonal properties of basis functions.
- Substantially fast computations are realized without any major deterioration.
- Performance assessments are conducted on 2D structured and 3D unstructured meshes.

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