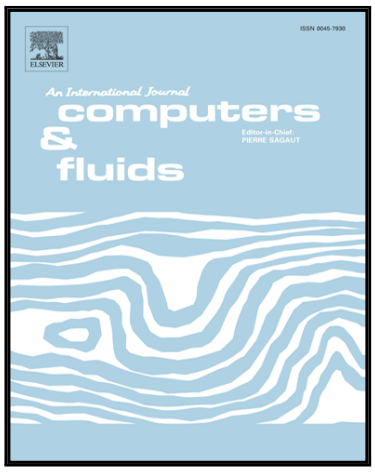

A high-order flux reconstruction/correction procedure via reconstruction formulation for unsteady incompressible flow on unstructured moving grids

Meilin Yu , Lai Wang

PII: S0045-7930(16)30175-X
DOI: 10.1016/j.compfluid.2016.05.028
Reference: CAF 3199

To appear in: *Computers and Fluids*

Received date: 28 February 2016
Revised date: 16 May 2016

Please cite this article as: Meilin Yu , Lai Wang , A high-order flux reconstruction/correction procedure via reconstruction formulation for unsteady incompressible flow on unstructured moving grids, *Computers and Fluids* (2016), doi: 10.1016/j.compfluid.2016.05.028

Highlights

- A high-order FR/CPR method is developed for incompressible flow on moving grids.
- Geometric conservation law is implicitly enforced for moving grid simulation.
- LUSGS is used to accelerate dual time stepping for unsteady flow simulation.
- Convergence properties of the incompressible flow solver are verified.
- Several vortex-dominated flows over moving curved boundaries are simulated.