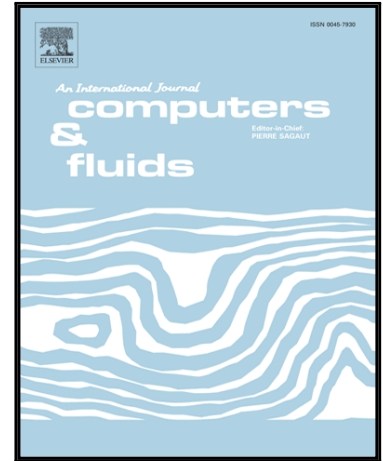


## Accepted Manuscript

Efficient Dimension-by-Dimension Higher Order Finite-Volume  
Methods for a Cartesian Grid with Cell-based Refinement

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## Highlights

- High-order FVM is developed for Cartesian grids with cell-based refinement.
- The quadrature modification flux eliminates multi-point flux quadrature.
- The scheme retains second-order accuracy near hanging-nodes.
- The formulation is defined by only the values stored in face-left and right cells.
- The scheme reproduces higher resolution than the conventional scheme.

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