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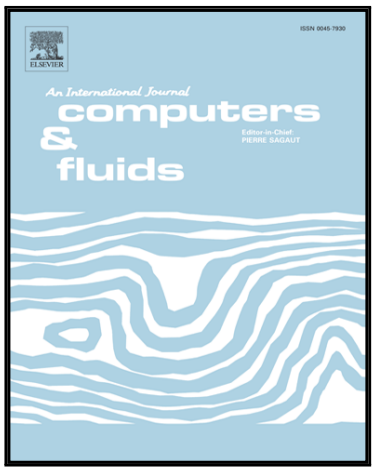

A Novel Stencil Selection Method for the Gradient Reconstruction on Unstructured Grid based on OpenFOAM

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Highlights

- A novel stencil selection method for the gradient reconstruction is presented.
- An advancing front technique is used for boundary information.
- The new method is robust for various kinds of unstructured meshes.
- The convergence speed is improved to be 1.64~2.60x faster than that of extLSQR.
- A competitive order of accuracy can be achieved by less stencil cells.

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