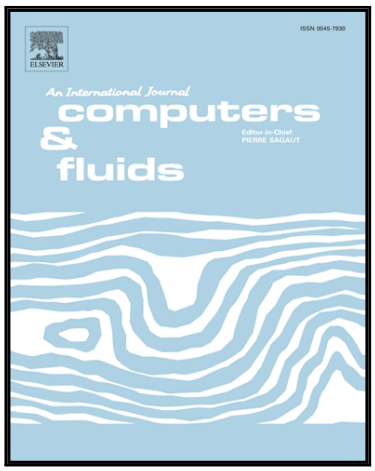

Simulations of turbulent duct flow with lattice Boltzmann method on GPU cluster

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Highlights

- Turbulent duct ows are simulated with LBM on GPU cluster.
- Anisotropy of turbulence and hence secondary ow is correctly predicted.
- Q criterion is used to identify the near wall turbulence structure.
- 2-D domain decomposition enhances scalability on GPU cluster.