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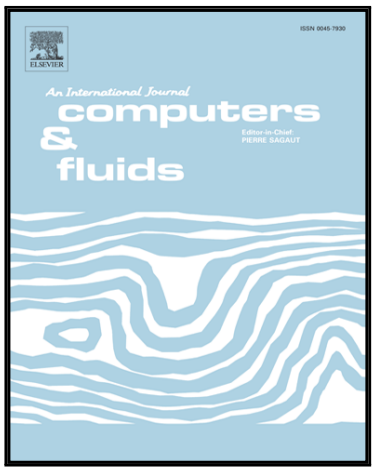

Sediment Transport in Turbulent Flows with the Lattice Boltzmann Method

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Highlights

- A novel approach to sediment transport with LBM is introduced for turbulent flows
- KBC collision model for D3Q7 lattice and advection-diffusion simulation is presented
- KBC model for D3Q7 lattice varies depending on nature of advection velocity
- The model can reproduce the sand bed around a horizontally bedded finite cylinder

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