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MODELLING OF THE BOUNDARY CONDITION FOR MICRO CHANNELS WITH USING LATTICE BOLTZMANN METHOD (LBM)²

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Abstract: Modelling of the boundary condition for micro channels with using Lattice Boltzmann Method (LBM) are investigated numerically in this work. Poiseuille flow in the continuum, slip and transition regimes is examined by using bounce-back, reflection factor and accommodation coefficient boundary conditions on solid walls with different mesh numbers. Numerical results from Lattice Boltzmann Method (LBM) are compared with analytical results.

Keywords: Lattice Boltzmann Method, Micro Channel, Boundary Conditions

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