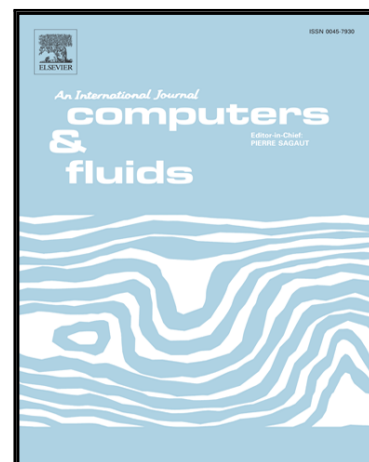


Consistent boundary conditions of the Multiple-relaxation-time lattice Boltzmann method for convection-diffusion equations

Liangqi Zhang , Shiliang Yang , Zhong Zeng , Jia Wei Chew

PII: S0045-7930(18)30223-8
DOI: [10.1016/j.compfluid.2018.04.027](https://doi.org/10.1016/j.compfluid.2018.04.027)
Reference: CAF 3872



To appear in: *Computers and Fluids*

Received date: 14 September 2017
Revised date: 5 March 2018
Accepted date: 17 April 2018

Please cite this article as: Liangqi Zhang , Shiliang Yang , Zhong Zeng , Jia Wei Chew , Consistent boundary conditions of the Multiple-relaxation-time lattice Boltzmann method for convection-diffusion equations, *Computers and Fluids* (2018), doi: [10.1016/j.compfluid.2018.04.027](https://doi.org/10.1016/j.compfluid.2018.04.027)

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

Highlights

- A second-order boundary scheme is proposed for convection-diffusion MRT LBM.
- Consistent implementations of Dirichlet, Neumann, Robin conditions are developed.
- The proposed boundary scheme is extended to curved boundary treatments.
- The advantages of the present curved boundary scheme are locality and consistency.

ACCEPTED MANUSCRIPT

Download English Version:

<https://daneshyari.com/en/article/7155991>

Download Persian Version:

<https://daneshyari.com/article/7155991>

[Daneshyari.com](https://daneshyari.com)