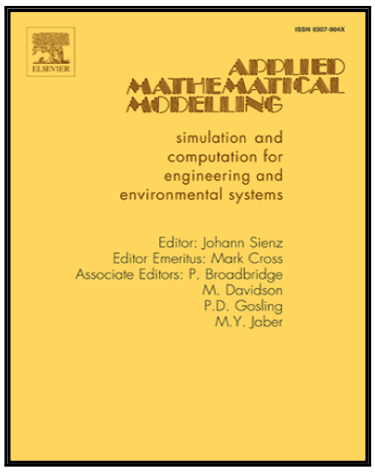

An immersed-boundary method for compressible viscous flows and its application in the gas-kinetic BGK scheme

Ruifeng Yuan, Chengwen Zhong

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Highlights

- A local boundary determination ghost-cell IB method has been proposed.
- The sigularity of the ghost cell is eliminated.
- The fresh cell in moving boundary case is treated by a simple temporal extrapolation.
- The IB method is applied in GKS to study compressible flow with moving boundaries.
- "super-convergence" and the low temperature accuracy of GKS are studied.