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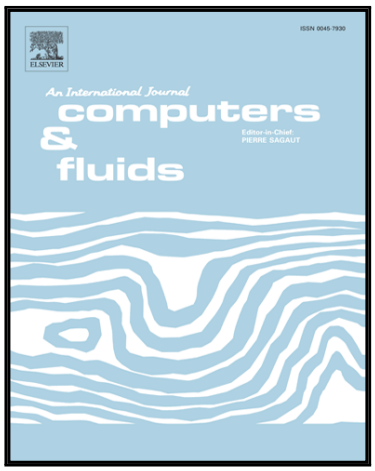

Application of model kinetic equations to hypersonic rarefied gas flows

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Highlights

- Accuracy of model kinetic equations for hypersonic flows is accessed
- Comparison with DSMC is provided for M=25
- External flow of a over a complex model winged re-entry vehicle with orbital free-stream velocity is presented
- Solver scalability for up to 256 nodes (61440 hyperthreads) is shown.

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