Minisymposium Title

Lattice Boltzmann methods for fluid dynamics (晶格波滋曼計算法於流體力學的應用)

Description

In the past decade, lattice Boltzmann methods (LBM) have emerged as an efficient alternative for computational fluid dynamics. Compared with conventional algorithms, such as finite volume methods, LBMs are not only easier to be numerically programmed but also more flexible to be applied to various fluid problems, including porous media flows, multiphase flows, magnetic flows, particulate suspensions, flows over complex boundaries, high-Reynolds number flows, etc. Furthermore, LBMs have been providing the strength towards a GPU-friendly algorithm. While LBMs have offered solutions to a variety of fluid flow problems, the evolution of their computational techniques and capabilities continues to provide challenges for LBM users and researchers. This minisymposium aims to discuss the state-of-the-art in thermofluid studies using LBMs.

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