

数学与系统科学研究院
计算数学所网络学术报告

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报告题目：

**High Resolution Multi-organ
Hemodynamic Simulation with High
Performance Computing**

邀请人： 黄记祖 副研究员

报告时间： 2021 年 12 月 9 日 (周四)

下午 15:00-16:00

报告工具： 腾讯会议 (ID: 938-164-182)

Abstract:

Patient-specific blood flow simulations have the potential to provide quantitative predictive tools for virtual surgery, treatment planning, and risk stratification. To accurately resolve the blood flows based on the patient-specific geometry and parameters is still a big challenge because of the complex geometry and the turbulence, and it is also important to obtain the results in a short amount of computing time so that the simulation can be used in surgery planning. In this talk, we will present some recent results of the multi-organ blood flow simulations with patient-specific geometry and parameters on a large-scale supercomputer. Several mathematical, biomechanical, and supercomputing issues will be discussed in detail. We will also report the parallel performance of the methods on a supercomputer with a large number of processors.

欢迎大家参加！