CompBioMed

A Centre of Excellence in Computational Biomedicine

**Webinar series**

# Webinar #3: Lattice Boltzmann method for CompBioMed (incl. Palabos)

## 19 March 2018

12pm CET / 11am GMT (1 hour duration)

Register for **free**: https://attendee.gotowebinar.com/register/8754123952759333635

The webinar provides a general introduction to the lattice Boltzmann method for computational fluid dynamics, and shows how this tool is used efficiently for biomedical applications. The provided examples include a vertebroplasty and a hemodynamics solver, both based on the open-source library Palabos. The former simulates a cement injection process in vertebroplasty, and the latter the dynamics of blood flow after the insertion of a flow diverter in an artery with an aneurysm. Both tools work with patient-specific data and are intended as support tools for medical decision making. No prior knowledge in computational fluid dynamics or the lattice Boltzmann method is required.

This webinar is delivered by the Scientific and Parallel Computing Lab, which is part of the Computer Science Department of the **University of Geneva**, and is directed by Prof. Bastien Chopard. The two main axes of research are Complex Systems and Bioinformatics.

This is the third of a series of webinars that the CompBioMed Centre of Excellence is organising in collaboration with the VPH Institute. Watch the full series on www.compbiomed.eu

**Dr Jonas Latt** is Head of Research at the University of Geneva and committee member of the Swiss Supercomputing Center CADMOS. He obtained his PhD degree on the topic of lattice Boltzmann modelling of fluid flow at the University of Geneva, Switzerland, in 2007, and since then pursued an academic career in Computational Fluid Dynamics and High Performance Computing. He is the original developer and current project manager for the Palabos software, the widely recognized worldwide open-source lattice Boltzmann solver for massively parallel multi-physics application.



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