CompBioMed

A Centre of Excellence in Computational Biomedicine

Webinar series

Webinar #4: Introduction to Biomedical Applications on High Performance Computers

7 June 2018

12pm CEST / 11am UK time (1 hour duration)

Register for **free**: https://attendee.gotowebinar.com/register/6428440257819269379

This webinar introduces the fundamental concepts and basic tools of HPC environments, and includes an application example of flowing red blood cells in a vessel section. It is divided into 2 major sections. The first part, presented by Dr Gavin J. Pringle (EPCC), presents a high-level overview of HPC along with practical examples. The second part, presented by Dr Gábor Závodszky (UvA), showcases the usage of an open-source HPC code (www.hemocell.eu), which is built to simulate blood flows on the level of single cells. The whole talk forms a coherent unit providing a brief guide that takes you from the conceptual basics of HPC computing to an actual application.

This is the 4th of a series of webinars that the CompBioMed Centre of Excellence organises in collaboration with the VPH Institute. Watch the full series on www.compbiomed.eu!

Dr Gavin J. Pringle received a PhD in CFD from Napier University, with University of Edinburgh and the University of California at Berkeley as cooperating institutions. After a four year post-doc at Napier, researching the Lagrangian simulation of turbulent fluid flow over a sphere, he moved in 1997 to EPCC (www.epcc.ed.ac.uk), University of Edinburgh, and is currently an Applications Consultant in High Performance Computing. Currently, Gavin is WP leader for CompBioMed Innovation and Sustainability; and managing the Fortissimo Helpdesk, where Fortissimo is an EU umbrella project with eight EU HPC centres to sell HPC cycles and expertise to Industry.

Dr Gábor Závodszky has a background in physics and obtained his PhD in biofluid-related CFD in 2015. He is currently a PostDoc at the Computational Science Lab of the University of Amsterdam (www.uva.nl), where he plays a role in several ongoing projects, such as CompBioMed, INSIST, and the National Brain Research Program (NAP). His areas of interest include: applications of the lattice Boltzmann method, GPU programming, data visualisation, particle transport physics, chaotic flows and cellular suspensions.

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