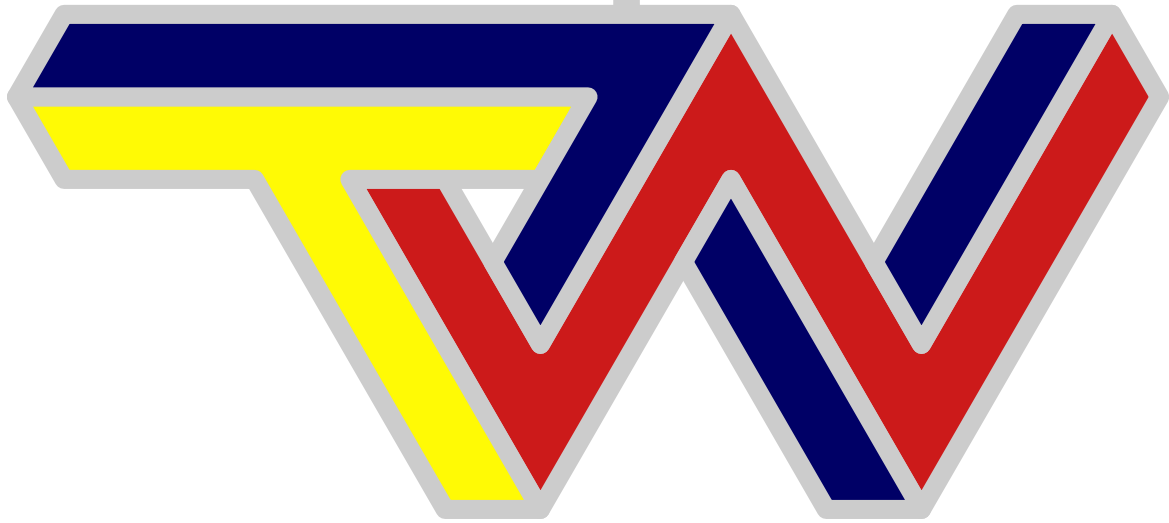


# Colloquium



**Alfons Hoekstra (UvA)**

## **A Multiscale Modelling & Computing Framework and selected Applications for the Virtual Physiological Human**

**Tuesday 21 February, Citadel H-327, 15:45-16:30**

Despite the ever increasing interest in Multiscale Modelling & Computing (MM&C) there still seems to be a lack of generic mathematical & computational frameworks that capture the main ingredients of MM&C. I will present one attempt, Complex Automata, and illustrate the potential of such generic MM&C frameworks through a number of canonical examples. Next I will zoom in to the Virtual Physiological Human, and apply the formalism to two systems, that of in-stent restenosis in coronary arteries and thrombus formation in intracranial aneurysms.



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Dr. Ir. Alfons Hoekstra studied physics in Twente, and got his PhD in Computational Physics from the University of Amsterdam. Currently he is Associate Professor in Computational Science at that same university. His main research interests are in Multiscale Modelling, and High Performance - and Distributed Computing, with applications mainly in the biomedical domain. See <http://uva.computationalscience.nl> and <http://staff.science.uva.nl/~alfons/>