Harald Van Brummelen, Eindhoven University of Technology, Netherlands

Talk title	**Recent advances in computational elasto-capillary fluid-solid interaction**
Biography	Harald van Brummelen is Full Professor and group leader of the Multiscale Engineering Fluid Dynamics Group at Eindhoven University of Technology (TU/e) in the Netherlands. His research focuses on the development, analysis and application of mathematical-physical models and advanced numerical techniques for multiscale flow problems in engineering applications, with particular emphasis on interface and free-boundary problems, coupled problems, and transitional molecular/continuum flows. His work mostly concentrates on high-tech applications such as semi-conductor lithography and inkjet printing. Van Brummelen's research interests span a broad range of topics in Computational Science and Engineering, including multiscale problems and techniques; coupled problems; fluid-structure interaction; free-boundary and interface problems; phase-field models; isogeometric analysis; immersed methods; kinetic models and the Boltzmann equation; moment-closure approximations; reduced-order modeling; and error estimation and adaptivity. Prof. Van Brummelen is the scientific director of the Dutch national research school on Engineering Mechanics, and Secretary General of the European Community on Computational Methods in Applied Sciences (ECCOMAS). He is a recipient of the J.-L. Lions Award and the Bill Morton prize, and various other grants and awards. Prof. van Brummelen is an associate editor of Computer Methods in Applied Mechanics and Engineering.