Clausthal-Göttingen International Workshop on
Simulation Science

27 - 28 April 2017, Göttingen, Germany

First Call for Papers

Due to the fast development of information technology, the understanding of phenomena in natural, engineer, economy and social sciences increasingly relies on computer simulations. Simulation-based analysis and engineering techniques are traditionally a research focus of Clausthal University of Technology and University of Göttingen, which is especially reflected in their common interdisciplinary research cluster "Simulation Science Center Clausthal-Göttingen". In this context, the first "Clausthal-Göttingen International Workshop on Simulation Science" aims to bring together researchers and practitioners from both industry and academia to report on the latest advances in simulation science.

The workshop will take place in the "Convention Centre by the Observatory" in Göttingen, which is an outbuilding of the Historical Observatory — the former residence and place of work of Göttingen's famous academic Carl Friedrich Gauss. Göttingen is situated in the geographical center of Germany and easily reachable from all major German airports.

Topics of Interest

The workshop considers the broad area of modeling & simulation. A special focus will be devoted to the following topics.

- **Simulation and optimization in networks:** Public & transportation networks, computer & sensor networks, queuing networks, Internet of Things (IoT) environments, simulation of uncertain optimization problems, simulation of complex stochastic systems
- **Simulation of materials:** Development and applications of computational techniques in material and process simulation, simulation at micro (atomistic), meso and macro (continuum) scales including scale bridging, diffusive, convective transport and chemical processes in materials, simulation of granular matter
- **Distributed simulations:** Technology enablers for distributed simulation (e.g., simulation support for vector and parallel computing architectures, grid-based systems and cloud-based systems), methods for distributed simulation (e.g., agent-based simulation, multi-level simulation, and simulation for big data analytics, fusion and mining), application examples (e.g., simulation-based quality assurance and high-energy physics)

Extended Abstract & Paper Submission

Authors are invited to submit extended abstracts (2-3 pages) via the submission system on the workshop webpage. All accepted abstracts are scheduled for presentation at the workshop.

Extended Abstracts Deadline: January 20, 2017
Notification of Acceptance: February 15, 2017

Authors of accepted abstracts are invited to submit full papers for the post-workshop proceedings that will be published by Springer, probably in the LNCS series (conditionally accepted). The deadline will be after the workshop in May 2017. Submitted full papers will undergo a second review process.

Organization

General Co-Chairs:
- Marcus Baum, Univ. of Göttingen
- Gunther Brenner, TU Clausthal
- Jens Grabowski, Univ. of Göttingen
- Thomas Hanschke, TU Clausthal
- Stefan Hartmann, TU Clausthal
- Anita Schöbel, Univ. of Göttingen

Program Committee:
- Valentina Cacchiani, University of Bologna
- Stefan Diebels, Saarland University
- Jürgen Dix, TU Clausthal
- Felix Fritzen, University of Stuttgart
- Igor Gilitschenski, ETH Zürich
- Marc Goerigk, Lancester University
- Marco Huber, USU AG, Karlsruhe
- Allan Larsen, Technical University of Denmark
- Ming Li, Nanjing University
- Laura De Lorenzis, TU Braunschweig
- Kai Nagel, TU Berlin
- Helmut Neukirchen, University of Iceland
- Bernhard Neumair, Karlsruhe Inst. of Techn.
- Ulrich Rieder, Ulm University
- Rüdiger Schwarze, TU Freiberg
- Thomas Spengler, TU Braunschweig
- Ulrich Tallarek, Philipps-Universität Marburg
- Pieter Vansteenwegen, KU Leuven
- Sigrid Wenzel, University of Kassel
- Peter Wriggers, University of Hanover
- Ramin Yahyapour, GWDG

Finance Chair:
- Alexander Herzog, TU Clausthal

Local Arrangements Chair:
- Annette Kadziora, Univ. of Göttingen

www.simscience2017.uni-goettingen.de

TU Clausthal

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SWZ Clausthal – Göttingen
Simulation Science Center