

Clausthal-Göttingen International Workshop on Simulation Science

8 - 10 May 2019, Clausthal-Zellerfeld, Germany

Call for Papers

Digital transformation concerns the application of digital technology in all aspects of human society. Due to this development, simulation and modeling techniques have become a central activity in many disciplines including natural science, engineering, economy and social sciences.

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".

The second "Clausthal-Göttingen International Workshop on Simulation Science" aims to bring together researchers and practitioners from industry and academia to report on the latest advances in simulation science.

Topics of Interest

The workshop considers the broad area of modeling & simulation focusing on:

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 enabler 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)

Organization

Joint Organizing Committee:

• Nina Gunkelmann, TU Clausthal (Germany)

- Marcus Baum, University of Göttingen (Germany)
- Gunther Brenner, TU Clausthal (Germany)
- Jens Grabowski, University of Göttingen (Germany)
- Thomas Hanschke, TU Clausthal (Germany)
- Jörg Müller, TU Clausthal (Germany)
- Anita Schöbel, University of Göttingen (Germany)

Program Committee:

- Charlotte Becquart, University of Lille (France)
- Wolfgang Bleck, RWTH Aachen (Germany)
- Christian Brandl, University of Melbourne (Australia)
- Valentina Cacchiani, University of Bologna (Italy)
- Paul Davidsson, University of Malmö (Sweden)
- Umut Durak, DLR Braunschweig (Germany)
- Samuel Forest, MINES Paristech (France)
- Marc Goerigk, Lancaster University (England)
- Patrick Harms, University of Göttingen (Germany)
- Tom Holvoet, University of Leuven (Belgium)
- Marco Huber, University of Stuttgart (Germany)
- Charlotte Kuhn, TU Kaiserslautern (Germany)
- Laura De Lorenzis, TU Braunschweig (Germany)
- Maximilian Merkert, OVGU Magdeburg (Germany)
- Kai Nagel, TU Berlin (Germany)
- Helmut Neukirchen, University of Iceland (Iceland)
- Bernhard Neumair, KIT Karlsruhe (Germany)
- Narayan Rangaraj, IIT Bombay (India)
- Ulrich Rieder, Ulm University (Germany)
- Yudi Rosandi, University of Padjadjaran (Indonesia)
- Carlos J. Ruestes, National University of Cuyo (Argentina)
- Siegfried Schmauder, University of Stuttgart (Germany)
- Rüdiger Schwarze, TU Freiberg (Germany)
- Thomas Spengler, TU Braunschweig (Germany)
- Pieter Vansteenwegen, KU Leuven (Belgium)
- Roberto Gomes de Aguiar Veiga, University Sao Paulo (Brazil)
- Giuseppe Vizzari, University of Milano-Bicocca (Italy)
- Sigrid Wenzel, University of Kassel (Germany)
- Peter Wriggers, University of Hanover (Germany)
- Ramin Yahyapour, GWDG (Germany)
- Gregory Zacharewicz, IMT Mines Ales (France)

Finance Chair:

• Alexander Herzog, TU Clausthal (Germany)

Extended Abstract & Paper Submission

Authors are invited to submit extended abstracts (2 pages) via the submission system on the webpage. Accepted abstracts are scheduled at the workshop.

Extended Deadline: January 9, 2019

Notification of Acceptance: February 25, 2019

All accepted abstracts are scheduled for presentation at the workshop. Authors of accepted abstracts are invited to submit full papers for the post-proceedings. Accepted post-proceedings will be published by Springer's CCIS series. The deadline will be afterwards in July 2019.

www.simscience2019.tu-clausthal.de

