

Call for Papers - ImViReLL'14

2nd Conference on “The Impact of Virtual, Remote and Real Logistics Labs”



Logistics research has seen a technology push over the last years. Established material handling technologies have been complemented by ubiquitous technologies such as Auto-ID, Sensors and decentralized processing capabilities. The technical complexity is still growing, thus leading to a situation where businesses are sometimes overstrained by the possible potentials on the one hand and unclear benefits on the other.

Logistics labs promise to overcome this gap – in applied research as well as in education – and serve as a place for hands-on experience. On the one hand, the concrete forms of experiments, testing and development possibilities are numerous, but on the other hand, the efforts for establishing a lab and keeping it vital are huge. The goal of the conference is to focus on lab-based research and education, evaluate their impact in research and education and investigate specific demands, opportunities and challenges.

2nd ImViReLL 2014 provides a venue for researchers from academia and industry interested in future-oriented logistics labs as a nucleus for innovation. The conference addresses research in logistics from a wide range of fields, e.g. retail, engineering, computer science, distributed education and collaborative research. This academic conference will be held in combination (parallel sessions) with the 4th International conference on Dynamics in Logistics ([LDIC 2014](#)) – registration will allow access to both conferences! The conference will take place between February 10th and 14th, 2014 in Bremen, Germany.

Objective of the Conference

The goal of the conference is to evaluate the impact of lab-based research in logistics. The following topics should be considered:

lab-based:

- technology and feasibility studies
- pilots and demonstrators
- inter-/multi-disciplinary research
- innovation

lab-centric:

- logistics research in different industries (e.g. retail, automotive, aviation, ...)
- specifics of logistic labs
- synergies with labs in other research disciplines (e.g. electrical engineering)
- virtual research environments and communities
- remote research environments and virtualisation
- real research environments
- co-developments, co-publications and intellectual property rights
- living-labs in logistics and end-user involvement
- complexities of creating, using, maintaining and growing lab-infrastructures
- business models and sustainability concepts for research labs

technology-centric:

- the role of RFID, sensors, actuators, robots, intelligent material handling

- the role of do-it-yourself kits such as Arduino or RasPi
- (de-) centralised data-processing in logistic labs
- data sharing
- the role of the Internet of Things, the Future Internet, Industry 4.0, Cloud Computing and Big Data for logistic labs
- architecture developments and standards for multiple (networked) demonstrators and experiments
- social networking technology in research
- human interfaces

impact on:

- applied research in logistics
- research quality and collaboration
- business innovation and innovation marketing
- society (incl. e.g., opportunities of access to remote and virtual labs for developing countries)

educational implications:

- e-, m- and virtual learning environments
- interdisciplinary and cross-cultural education in engineering
- teaching experience and quality
- structures of supervision processes in distributed lab-oriented PhD research

Submission

Papers submitted to the conference must contain original research and should not exceed twelve pages. Papers must be provided in MS Word format. Simultaneous submission to other conferences with proceedings or submission of material that has already been published elsewhere is not allowed.

All accepted full papers will be published in the Springer Conference Proceedings. See the corresponding Springer layout guidelines (CCIS/LNCS) for further layout / style informations. We would especially like to encourage live (remote) demonstrations as well as video contributions during the conference to illustrate lab-based research.

Key Dates

- Submission of papers: October 15, 2013
- Notification of acceptance: December 1, 2013
- Camera ready versions due: January 9, 2014
- Main conference: February 11 – 13, 2014
- Conference with satellite events: February 10 – 14, 2014

Committees

Conference Chairs

- Dieter Uckelmann, Hochschule für Technik Stuttgart, Germany
- Ingrid Rügge, International Graduate School for Dynamics in Logistics, University of Bremen, Germany
- Marco Lewandowski, Log *Dynamics* Lab, University of Bremen, Germany
- Klaus-Dieter Thoben, BIBA – Bremer Institut für Produktion und Logistik GmbH, Germany
- Hans-Dietrich Haasis, ISL – Institute of Shipping Economics and Logistics, Germany

Scientific Committee

- Gisele Bennett, Electro-Optical Systems Laboratory, Georgia Tech Research Institute, USA
- Shing-Chi Cheung, RFID Center, Hong Kong University of Science and Technology, China
- Volker Coors, HFT Stuttgart, Germany
- Javier García-Zubia, Deusto Institute of Technology, Spain
- Willibald Günthner, TU Munich, Germany
- Bill C. Hardgrave, Auburn University, USA
- Vaggelis Giannikas, Ifm, University of Cambridge
- Bonghee Hong, Institute of Logistics Information Technology (LIT), Pusan National University, Korea

- Gerrit Kahl, Ubiquitous Media Technology Lab (UMTL), Germany
- Reza Karimi, University of Agder, Norway
- Michael Lawo, University of Bremen, Germany
- Yu Liu, RFID Lab, Chinese Academy of Science (CASIA), Beijing, China
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- Justin Patton, University of Arkansas RFID Research Center, USA
- Alexander Pflaum, University of Bamberg, Germany
- Antonio Rizzi, RFid Lab, University of Parma, Italy
- Michael Schenk, Fraunhofer-Institut für Fabrikbetrieb und -automatisierung IFF, Magdeburg, Germany
- Alp Üstündağ, ITU Institute of Science and Technology, Turkey

Local Organisation

- Aleksandra Himstedt, University of Bremen, Germany
- Marco Lewandowski, LogDynamics Lab, University of Bremen, Germany

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