Welcome to the
ICE Conference 2011

20th to 22nd of June 2011
Aachen, Germany
ICE 2011: Introducing Aachen

- The city where research looks to the future*

- The city that offers a unique combination of rich cultural heritage and a great research environment

- The city with more ~ 12,000 employees in research facilities and app. 42,000 students

Aachen

Center of Europe  Aix-la-Chapelle

RWTH Aachen University  CHIO

City of Fountains  Healing waters

Where the Kings got crowned

Hottest springs of Central Europe

UNESCO World Heritage Site

Aachener Printen
ICE 2011: RWTH Aachen University

- Budget: 611 Mio. Euro
- Third party funding: 227 Mio. Euro
- Contract Research: 70 Mio. Euro
- Affiliated institutes: 35 Mio. Euro

- 450 professorships
- 262 institutes, including 20 major institutes
- 4 Fraunhofer Institutes
- 13 Affiliated institutes
- 9 Research Training Groups
- > 31,000 students

New initiative at RWTH since 2009
Initiatives to bring industry and academia together to collaborate and innovate
Up to 19 research clusters
Your Host for ICE 2011: FIR at RWTH Aachen

Prof. Günther Schuh
Scientific Director

Prof. Volker Stich
Managing Director

Departments

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<th>Information Management</th>
<th>Service Management</th>
<th>Production Management</th>
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<td>Service Engineering</td>
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<td>Information Technologies</td>
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<td>Smart Object Innovation Lab</td>
<td>Service Science Innovation Lab</td>
<td>Competence Center IT-Management</td>
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RWTH AACHEN Campus
Innovations in Research: The RWTH Aachen Campus Project

Prof. Dr.-Ing. Volker Stich
ICE 2011, 20th June 2011
Our research approach

Research for Library

Research for Industry
The Vision: RWTH Aachen Campus as catalyst for research und trigger for innovation

Research Yesterday
- Long development times
- Narrow scope for solutions

Solution Space

Knowing, where it is written

Research Today
- Long development times
- Narrow scope for solutions

Solution Space

Knowing, who knows what

Research Tomorrow
- Shortened development times
- Ample room for solutions

Solution Space

Knowing, where knowledge is created

RWTH AACHEN Campus
Vision: To emerge as one of the world leading technical Universities, RWTH Aachen has started the RWTH Campus Project to foster cooperation of research and industry.

- **RWTH Aachen Campus Facts**
  - Area: appr. **545,000m²**
  - Capital commitments: appr. **2,000,000,000 €**
  - New direct and indirect jobs: appr. **10,000**

- The CAMPUS-Areal Melaten covers a total area of appr. **200,000m²**

- Additional Central Facilities will develop (Center for Continuing Education, Boulevard, „Campus Gate“, Child Care, Gastronomy, Hotels, Shopping, Services)
### Benefits for industry
- Increased R&D-speed
- Reduction of research risk
- Access to resources and young staff members
- Use of synergy effects
- Increase of attractiveness of companies
- Development of competitive advantages

### Benefits for university
- High-end research with intensive interaction between industry and economy
- Attractive teaching and training events
- Improvement of image
- Generating new financial sources
- Guarantee of topical relevance

### Benefits for members of staff
- Rapid and job-relevant qualifications
- Cosmopolitan working environment
- Broad offer of further training
- Doctorate close to industry
- Early setup of a personal network

### Benefits for public
- High-tech-developments
- R&D as competitive power
- Highly qualified jobs
- International attractiveness
- Increase of gross domestic product
Starting with six Campus Clusters

- Up to 250 national and international technology providers (research partner) get the opportunity to …
  - bring in own research and development capabilities
  - establish research cooperation with other parties
  - develop Lasting integration into research activities of RWTH Aachen
FIR’s Cluster Logistics
Innovating Products and Services for Collaborative Networks

Venue and program overview

**Monday, 20. June 2011**
- 3 Keynote presentations
- 5 Parallel Tracks: 15 sessions
- 65 papers
- Networking reception hosted by the Mayor of Aachen Mr. Marcel Philip

**Tuesday, 21. June 2011**
- Workshop Sessions
- Gala Dinner & Award Ceremony
- Innovation Lab Tours (lists at registration desk)

**Wednesday, 22. June 2011**
- Workshop Sessions
Monday: Paper Sessions

Track 1
Advances in Concurrent Engineering
A. Buzhany, D. Ronney: Lessons learned from One-Week Concurrent Engineering Study Approach
C. H. S. Fans, J. Lemons: Asset Management System Design
J. Y. Song, M. Kachayev, G. Ziegler, H. A. Moser: Critical Interaction Instances in Collaborative Concurrent Engineering

Approaches in Concurrent Engineering
P. Nasso, K. Kostadinov, M. Backnante: Practical Model for Effective Innovation in Agile Software Development
F. Mace, M. Schillinger: Defining a Research Framework for the Business Impact of Data Management

Track 2
Product and Service Engineering
C. Geistl, K. Krambeck, H. Schäflinger: Designing the Future: From Concept to Reality
F. Linner, K. Kemper, O. Kriegl, N. Grummed: Service-Oriented Internet of Things: A Comparative Study among Large and Small Firms

Product and Service Approaches
I. H. Hues, M. Müller, P. J. Steiner: Conceptualizing Product Service Strategies: Towards an Initial Framework
C. Dangkopp: Collaborative Networks for Product-Service Systems Delivery
A. H. Hues, J. Imoos, S. Weser, B. Beek: Introducing a Co-creative Innovation Environment for Extended Products
S. Schäfer, P. Thoma: Co-designing: Designing Cooperation Concepts for Service Networks

Track 3
Concurrent Engineering Domains
H. Daim, K. D. Thönen: Designing for Sustainable Manufacturing: A Requirements Analysis
K. M. Krumpp, K. Krambeck: GIS-based Track and Trace for Transparent and Sustainable Global Supply Chains
A. M. Schlepp: Supplier-led Enterprise Change Management within the AEC Sector
O. Wilder, J. Klüver, J. Gutboden: PLC Audit in the Telecommunication Industry

Track 4
Living Labs
F. F. Frank, W. Hauser, M. Schröder, H. Werner: Experiences from Using a Cooperative Engineering Approach to Tackle Hybrid Manufacturing Technologies

Track 5
Integrated Production Technology for High-Wage Countries
G. Schütz, A. Schmitz, A. Armbrecht, U. Lott, M. Herrmann: Impact of Digitalization on the Conceptual and Empirical Investigation of German Toolmaking Companies
G. Schütz, C. Thoma, S. Fotis, P. Schuh: Enabling Visualization in Production Control
T. Bremer, M. Schiller, F. Blaschke, H. Hering: Quick High-Resolution Production Control by Real-Time Information

Open Innovation
M. L. Leibrecht, R. Rief: Supporting the Selection of Open Innovation Software Tools
B. Serritz, P. Strag-Hold: Open Innovation System and Collaboration Platform for the Large EU Infrastructure Projects - NETLUSE Case Study
C. Dangkopp, N. Wiedemann: Towards a United Model of Co-creation
A. Bedir, D. Rasch: ELLIOT: Co-creating open innovation and living lab based evaluation to foster wider adoption of IoT-enabled solutions

Intelligent Non-Hierarchical Networks
L. Cantante, A. F. Pinto: Open Innovation Accelerators: Manufacturing Additive Manufacturing in the Mass Customization Market
J. Frohlich, J. Bechhage: State of the Art of Serious Games for Business and Industry
### Tuesday and Wednesday: Workshop Sessions

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<th>Track 1</th>
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| **Track 1**
| Enterprise Interoperability
| Collaboration and Interoperability Services in the COIN System: A Scientific Approach - 1
| Living Lab – Common Assets – 2
| Innovating Service Solutions – 2
| Enterprise Interoperability and Collaboration in the Enlarged Europe Community – 1
| Living Lab – Domain Networks – 2
| Enterprise Interoperability and Collaboration in the Enlarged Europe Community – 2
| Living Lab – Domain Networks – 2
| 00:00 – 10:30 | Living Lab – Common Assets – 1
| 10:30 – 11:00 | Innovating Service Solutions – 1
| 11:00 – 12:30 | Enterprise Interoperability and Collaboration in the Enlarged Europe Community – 1
| 12:30 – 13:30 | Living Lab – Domain Networks – 1
| 13:30 – 15:00 | Enterprise Interoperability and Collaboration in the Enlarged Europe Community – 2
| 15:00 – 15:30 | Living Lab – Domain Networks – 2
| 15:30 – 17:30 | Gala Dinner and Award Ceremony in the Historical Ballroom „Altes Kurhaus“
| 19:00 – 22:00 |

### Track 2
Living Labs

- Living Lab – Common Assets – 1
- Innovating Service Solutions – 1
- Enterprise Interoperability and Collaboration in the Enlarged Europe Community – 1
- Living Lab – Domain Networks – 1
- Enterprise Interoperability and Collaboration in the Enlarged Europe Community – 2

### Track 3
Service Science and Innovation

- Lean Service Processes
- Distributed, Standards-based Master Data Management for Seamless Interoperability – 1
- Distributed, Standards-based Master Data Management for Seamless Interoperability – 2
- Smart Objects and Complex Event Processing – 1
- Smart Objects and Complex Event Processing – 2
- Supplier performance evaluation via EDI – InTime (Case)
- Supplier performance evaluation via EDI – InTime (UseCase)

### Track 4
Organisational Integration & Responsiveness

- Design and Management (strategic, tactical and operational) of Non-Hierarchical Collaborative Manufacturing Networks – 1
- Design and Management (strategic, tactical and operational) of Non-Hierarchical Collaborative Manufacturing Networks – 2
- Production Planning In Serious Gaming – InTime (Game)
- Supplier performance evaluation via EDI – InTime (Case)

### Track 5
Professional Networks

- Towards Theoretical Framework of Living Lab Phenomena
- Future Internet Enterprise Systems – 1
- Future Internet Enterprise Systems – 2
- Closed Session

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ICE Conference 2011

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The Campus Cluster Logistics’ Innovation Labs address three main research areas:

**Service Science Innovation Lab**

**ERP Innovation Lab**

**Smart Objects Innovation Lab**

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**Invent the future of Services**

How can service innovations be successfully realised with the help of modern techniques and procedures?

**Create the Future of Enterprise Resource Planning**

Which systems, technologies, and standards are necessary to enable optimal information exchange in logistic networks?

**Enable High Resolution Transparency**

Which technologies and standards enable to model real-time logistic processes in information systems?

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Guided Tours!
ICE 2011: How to get in and around Aachen

Conference Venue

FIR-Innovation Lab Tours, Tuesday

Main Building RWTH Aachen

Gala Dinner, Tuesday, 19:00

Networking, Monday, 19:00

Main Station
## Key Speakers

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<th>Role</th>
<th>Name</th>
<th>Title</th>
<th>Topic</th>
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<td>Conference host and chair</td>
<td>Professor Volker Stich</td>
<td>FIR at RWTH Aachen Managing Director</td>
<td>Innovations in Research: The RWTH Aachen Campus Project</td>
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<td>First Opening Keynote</td>
<td>Jean Severijns</td>
<td>Technology Top Region Limburg Project Manager Internationalisation</td>
<td>Smart Specialisation Strategy in a Functional Region: The TTR-ELA triangle case</td>
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<td>Second Opening Keynote</td>
<td>Professor Günther Schuh</td>
<td>FIR at RWTH Aachen Scientific Director</td>
<td>Developing a production engineering based theory of production</td>
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<td>Networking Welcome, Monday</td>
<td>Marcel Philipp</td>
<td>City of Aachen Mayor</td>
<td>“Welcome in Aachen”</td>
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<td>Gala Dinner Keynote, Tuesday</td>
<td>Dr. Fiona Williams</td>
<td>Ericsson Eurolab Project Manager</td>
<td>Talk on concurrent enterprising</td>
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Thank You for your Attention

Enjoy ICE 2011

- Speakers have to be in the session rooms 15mn before the session start for uploading presentations. Please prepare a short bio.
- Session chairs to be in the session rooms 20mn before the session start for installing & connecting their laptop.
- Do not forget to wear your name batch all during the Conference – also for the evening events.