

ECOWS'11



European Conference on Web Services
14-16 September 2011, Lugano, Switzerland



9th IEEE European Conference on Web Services

Program

<http://ecows2011.inf.usi.ch>

Università
della
Svizzera
italiana

Faculty
of Informatics



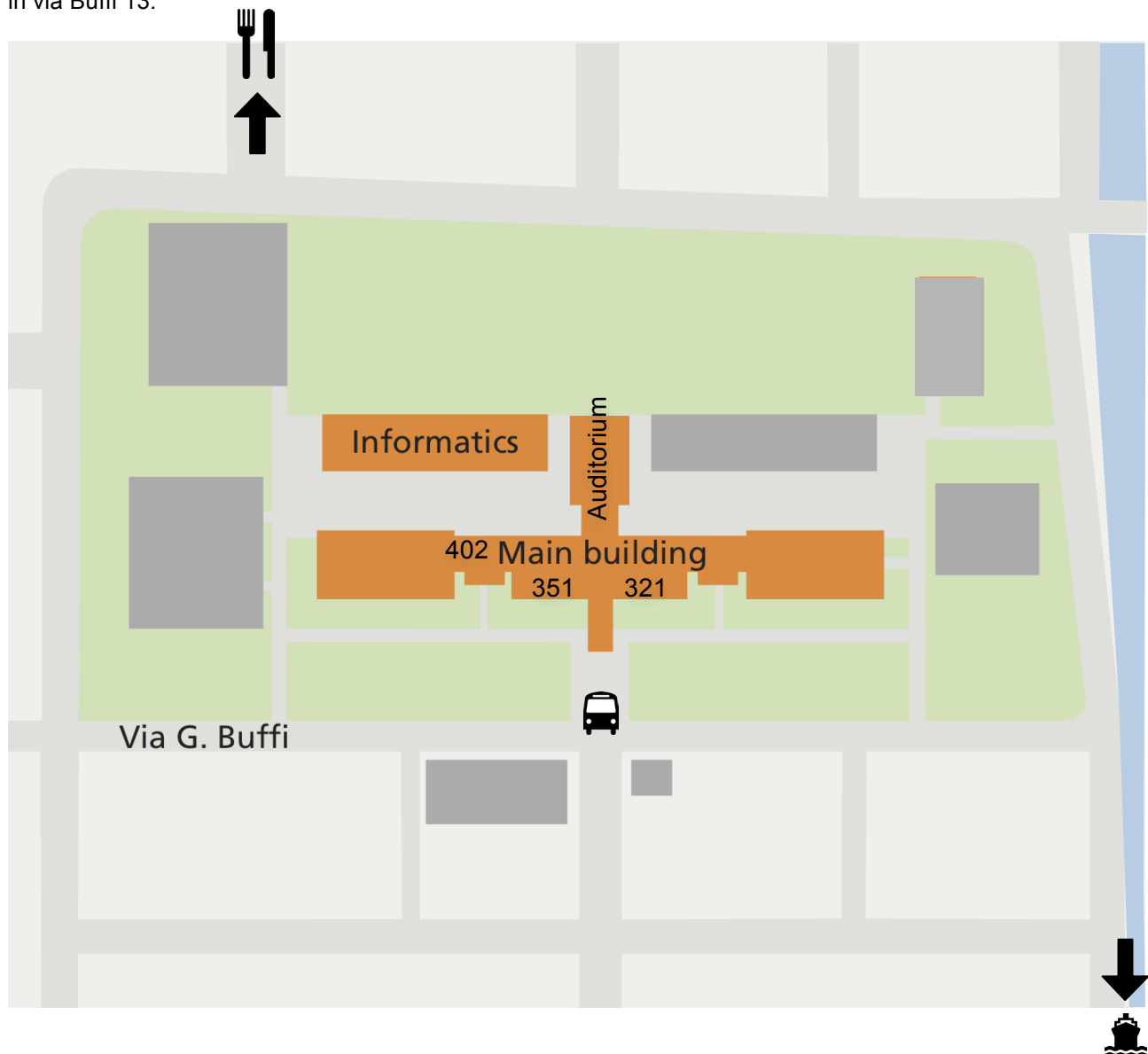
Overview

Wednesday 14.9.2011			Thursday 15.9.2011			Friday 16.9.2011				
8:00	Registration Opens									8:00
8:30	Keynote: Schahram Dustdar Auditorium			Keynote: Wil van der Aalst Auditorium		Keynote: Carlo Ghezzi Auditorium			8:30	
9:30	Coffee Break (Auditorium Hall)									9:30
10:00	WEWST'11 Room 402	Mashups 2011 Room 351	QASBA 2011 Room 321	Session 1 Auditorium	Tutorial Room 351	Session 4 Auditorium	Industry Track Papers Room 402	PhD Symposium Room 351	10:00	
12:00	Lunch (Ristorante Canvetto Luganese)									12:00
13:15	DATA VIEW'11 Room 402	Mashups 2011 Room 351	QASBA 2011 Room 321	Session 2 Auditorium	Tutorial Room 351	Keynote: Stefan Murrer Auditorium			13:15	
14:15						Invited Presentations Auditorium		PhD Symposium Room 351	14:15	
15:15	Coffee Break (Auditorium Hall)									15:15
15:45		Mashups 2011 Room 351	QASBA 2011 Room 321	Session 3 Auditorium	Tutorial Room 351	Session 5 Auditorium	Invited Presentation Room 402	PhD Symposium Room 351	15:45	
17:15	Closing Ceremony (Auditorium)									17:15
18:00	Welcome Boat Tour Castagnola Pier			ECOWS Banquet Castelgrande Bellinzona			<div>Workshops</div> <div>Research Track</div> <div>Industry Track</div> <div>PhD Symposium</div> <div>Tutorial</div> <div>Social Events</div>			
19:00	Welcome Reception Ristorante Parco Ciani									

- Workshops
- Research Track
- Industry Track
- PhD Symposium
- Tutorial
- Social Events

USI Campus Map

The ECOWS conference and co-located events will be held in the Main building of the University of Lugano in via Buffi 13.



The registration desk will be open at the entrance of the Main building on Wednesday 14.9. and Thursday 15.9. from 8:00-8:45. It will be relocated to the auditorium hall on the 3rd Floor afterwards.

The plenary sessions and the Research Track will be in the Auditorium reachable from the 3rd Floor of the USI Main building. The workshops, industry track and PhD Symposium will be in Rooms 321, 351 and 402 of the USI Main building.

Rooms 321 and 351 are opposite to the auditorium on the same 3rd floor. Room 402 is on the 4th floor. You can take the elevator in front of room 351.

Bus Transportation to the ECOWS banquet will leave in front of the USI Main building on Thursday at 18:00.

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Welcome

Dear participant!

We would like to welcome you to the 9th IEEE European Conference on Web Services (ECOWS 2011) hosted by the Faculty of Informatics of the University of Lugano (USI), Switzerland.

Lugano, the largest town in the holiday region of Ticino, is not only Switzerland's third most important financial centre, but also a pleasant town of parks and villas facing its international lake.

The USI Faculty of Informatics was founded in 2004 and stands out as a centre of excellence in software, systems and service engineering research. In a matter of a few years, it has become one of Switzerland's major poles for teaching and research in Informatics, currently hosting 22 Professors and more than one hundred Post-doctoral and Pre-doctoral researchers. The Faculty aims at training informatics experts that are interdisciplinary in approach, with abstract thinking and problem solving skills, a sound knowledge in the application fields of information technologies, as well as teamwork, interpersonal communication and project-management abilities.

This year's ECOWS conference program selected by the organizing committee forms a rich and balanced coverage of all current aspects of Web services research and industry best practices. As in previous editions, the program features four co-located workshops on the opening day and the PhD symposium on the closing day. Every day of the conference opens with a prestigious keynote speaker from academia. Additionally, this year also the industry track features a plenary keynote presentation featuring a retrospective on 13 years of SOA experience at Credit Suisse.

We wish to thank our outstanding keynote speakers Shahram Dustdar, Wil van der Aalst, Carlo Ghezzi, and Stephan Murer for sharing their deep insights and experiences on the state of the art and the future of Web services.

We would also like to express our gratitude to all the institutions and sponsors supporting the 2011 edition of ECOWS: The Faculty of Informatics, The University of Lugano (USI), The Swiss Informatics Society (S-I), the IEEE Technical Committee on Services Computing, the Associazione Ticinese Elaborazione Dati (ATED), IBM, Red Hat/JBoss, ATOMIKOS, Doodle AG, and the City of Lugano. A special thank you goes to the ECOWS steering committee, to the program chairs (Gianluigi Zavattaro and Ulf Schreier), the workshop chair (Flavio De Paoli), the industry chair (Olaf Zimmermann) and the PhD Symposium chair (Wolf Zimmermann). Finally, this conference would not have been possible without the excellent work of Elisa Larghi and the enthusiasm of many student volunteers. All of them helped to make ECOWS 2011 a reality and a big success.

A big thank you goes to all the researchers, practitioners and students whose active participation ensured the value of the conference. Enjoy ECOWS, the lake of Lugano, the food and the beautiful, sunny and friendly environment of Ticino!

Cesare Pautasso
ECOWS 2011 General Chair

Socially enhanced Services Computing

Schahram Dustdar

Vienna University of Technology, Austria

Wednesday 14.9.2011 8:30
Auditorium

Socially enhanced Services Computing deals with a novel and exciting new field at the intersection between Social Computing, Service-oriented Computing, Crowd Computing, and Cloud Computing. In this talk I will discuss some of our models and approaches in this area. The approach discussed allows for a seamless integration of people into trusted dynamic compositions of Human-provided Services and Software-based services, thus empowering new interaction models and processes in massive collaboration scenarios in a Future Internet.



Schahram Dustdar is Full Professor of Computer Science (Informatics) with a focus on Internet Technologies heading the Distributed Systems Group at the Vienna University of Technology (TU Wien). Since 2009 he is an ACM Distinguished Scientist. From 1999 – 2007 he worked as the co-founder and chief scientist of Caramba Labs Software AG (CarambaLabs.com) in Vienna (acquired by Engineering NetWorld AG), a venture capital co-funded software company focused on software for collaborative processes in teams. Caramba Labs was nominated for several (international and national) awards: World Technology Award in the category of Software (2001); Top-Startup companies in Austria (Cap Gemini Ernst & Young) (2002); MERCUR Innovationspreis der Wirtschaftskammer (2002). More information can be found here: <http://www.infosys.tuwien.ac.at/Staff/sd>

Business Process Configuration in the Cloud: How to Support and Analyze Multi-Tenant Processes?

Wil van der Aalst

Technische Universiteit Eindhoven, The Netherlands

Thursday 15.9.2011 8:30
Auditorium

Lion's share of cloud research has been focusing on performance related problems. However, cloud computing will also change the way in which business processes are managed and supported, e.g., more and more organizations will be sharing common processes. In the classical setting, where product software is used, different organizations can make ad-hoc customizations to let the system fit their needs. This is undesirable, especially when multiple organizations share a cloud infrastructure. Configurable process models enable the sharing of common processes among different organizations in a controlled manner. This paper discusses challenges and opportunities related to business process configuration. Causal nets (C-nets) are proposed as a new formalism to deal with these challenges, e.g., merging variants into a configurable model is supported by a simple union operator. C-nets also provide a good representational bias for process mining, i.e., process discovery and conformance checking based on event logs. In the context of cloud computing, we focus on the application of C-nets to cross-organizational process mining.



Prof.dr.ir. Wil van der Aalst is a full professor of Information Systems at the Technische Universiteit Eindhoven (TU/e). Currently he is also an adjunct professor at Queensland University of Technology (QUT) working within the BPM group there. His research interests include workflow management, process mining, Petri nets, business process management, process modeling, and process analysis. Wil van der Aalst has published more than 130 journal papers, 16 books (as author or editor), 250 refereed conference/workshop publications, and 50 book chapters. Many of his papers are highly cited (he has an H-index of more than 75 according to Google Scholar, making him the Dutch computer scientist with the highest H-index) and his ideas have influenced researchers, software developers, and standardization committees working on process support. He has been a co-chair of many conferences including the Business Process Management conference, the International Conference on Cooperative Information Systems, the International conference on the Application and Theory of Petri Nets, and the IEEE International Conference on Services Computing. He is also editor/member of the editorial board of several journals, including the Distributed and Parallel Databases, the International Journal of Business Process Integration and Management, the International Journal on Enterprise Modelling and Information Systems Architectures, Computers in Industry, Business & Information Systems Engineering, IEEE Transactions on Services Computing, Lecture Notes in Business Information Processing, and Transactions on Petri Nets and Other Models of Concurrency. He is also a member of the Royal Holland Society of Sciences and Humanities (Koninklijke Hollandse Maatschappij der Wetenschappen). For more information about his work visit: www.workflowpatterns.com, www.workflowcourse.com, www.processmining.org, www.yawl-system.com, www.wvdaalst.com.

The Fading Boundary between Development Time and Run Time

Carlo Ghezzi

Politecnico di Milano, Italy

Friday 16.9.2011 8:30
Auditorium



Modern software applications are often embedded in highly dynamic contexts. Changes may occur in the requirements, in the behavior of the environment in which the application is embedded, in the usage profiles that characterize interactive aspects. Changes are difficult to predict and anticipate, and are out of control of the application. Their occurrence, however, may be disruptive, and therefore the software must also change accordingly. In many cases, changes to the software cannot be handled off-line, but require the software to self-react by adapting its behavior dynamically, in order to continue to ensure the required quality of service. The big challenge in front of us is how to achieve the necessary degrees of flexibility and dynamism required in this setting without compromising dependability of the applications. To achieve dependability, a software engineering paradigm shift is needed. The traditional focus on quality, verification, models, and model transformations must extend from development time to run time. Not only software development environments (SDEs) are important for the software engineer to develop better software. Feature-full Software Run-time Environments (SREs) are also key. SREs must be populated by a wealth of functionalities that support on-line monitoring of the environment, inferring significant changes through machine-learning methods, keeping models alive and updating them accordingly, reasoning on models about requirements satisfaction after changes occur, and triggering model-driven self-adaptive reactions, if necessary. In essence, self-adaptation must be grounded on the firm foundations provided by formal methods and tools in a seamless SDE-SRE setting. The talk discusses these concepts by focusing on non-functional requirements---reliability and performance---that can be expressed in quantitative probabilistic requirements. In particular, it shows how probabilistic model checking can help reasoning about requirements satisfaction and how it can be made run-time efficient.

Carlo Ghezzi is a Professor and Chair of Software Engineering in the Department of Electronics and Information of Politecnico di Milano. He is the Rector's delegate for research, past member of the Academic Senate and of the Board of Governors, and past Department Chair. He is an ACM Fellow, an IEEE Fellow, and a member of the Italian Academy of Sciences. He was awarded the ACM SIGSOFT Distinguished Service Award (2006). He has been a member of the ACM Nominating Committee, and is presently a member of the committee for the ACM Software Systems Award and a Member-at-Large of the ACM Executive Committee. He has been on the evaluation board of several international research projects and institutions in Europe, Japan, and the USA. Ghezzi has been the Editor in Chief of the ACM Trans. On Software Engineering and Methodology (from 2001 till 2006). He is currently an Associate Editor of IEEE Trans. on Software Engineering, Science of Computer Programming, Service Oriented Computing and Applications, and Software Process Improvement and Practice. His research has been focusing on software engineering and programming languages. Currently, he is especially interested in methods and tools to improve dependability of adaptable and evolvable distributed applications, such as service-oriented architectures and ubiquitous/pervasive computer applications. He co-authored over 160 papers and 8 books. He coordinated several national and international (EU funded) research projects. He has recently been awarded an Advanced Grant from the European Research Council.

13 Years of SOA at Credit Suisse: Lessons Learned – Remaining Challenges

Stephan Murer
IT Chief Architect at Credit Suisse AG

Friday 16.9.2011 13:15
Auditorium

Credit Suisse has been active in the field of service oriented architecture over many years. I chose the birth date of the “Credit Suisse Information Bus” 13 years ago as the starting point of a long journey towards an enterprise SOA at Credit Suisse. I have chosen a number of case studies, marking major steps in the SOA progress. Each case study starts with a strategic business need, continues with the chosen solution, and concludes with a discussion of the achievements and the remaining gaps. Putting these case studies into a historic perspective, shows a continuous evolution, where each step expands the business value, closes gaps of previous solutions, and last but not least leads to new challenges. I will illustrate each case study with examples and data.



Stephan Murer got his Diploma and Ph.D. in computer science from ETH Zürich, doing research on using hardware supported context switches to hide memory latency in non-uniform memory architectures. After that he moved on to the International Computer Science Institute at UC Berkeley to continue and expand his research into parallel object-oriented programming languages and type systems for object-oriented languages. After returning to Switzerland, he left academia and started his career in Credit Suisse as an internal consultant. Up to the year 2000 Stephan held different roles in Credit Suisse as a manager, project lead, and technical expert. In 2000 he was promoted to managing director and put in charge of the firm's information systems architecture. Today, he is still chief architect, directly reporting to the CIO of Credit Suisse. Besides his main job, Stephan remained active in the academic world, where he occasionally teaches and has enabled a number of industry collaborations. Among other activities, Stephan served as a member of the Swiss National Research Council, helping the National Science Foundation to allocate research funding.

6th International Workshop on Enhanced Web Service Technologies

<http://www.inf.usi.ch/faculty/binder/wewst11/>

Wednesday 14.9.2011
Room 402

Chairs: Walter Binder
Heiko Schuldt

The Workshop on Enhanced Web Service Technologies (WEWST) is the premier workshop for academic and industrial communities to discuss innovative ideas and research contributions advancing the state-of-the-art in Web service technologies. Although the advantages of Web services to allow businesses to interact with each other while maintaining a loose coupling are well known, there are still many challenges to be solved in this important field of research. The wide variety of tools, techniques, and technological solutions presented in WEWST share one common feature: they suggest new directions for Web service research by introducing new and sometime controversial ideas into the field. The workshop allows participants to gain new insights and to start collaborations by discussing how their own work can be used in related but different areas.

8:30-9:30 **Keynote: Socially Enhanced Services Computing**
Auditorium Schahram Dustdar

10:00 **PEWS Platform: A Web Services Composition Environment**
C. Ba, M. Halfeld Ferrari, M. A. Musicante

10:30 **DomoML -
An Integrating Devices Framework for Ambient Intelligence Solutions**
L. Sommaruga, T. Formilli, N. Rizzo

10:55 **Extensible and Scalable Usage Accounting in Service-oriented Infrastructures
Based on a Generic Usage Record Format**
J. Götze, T. Fleuren, B. Reuther, P. Müller

11:20 **Trustworthiness Monitoring of Dynamic Service Compositions**
H. Elshaafi, J. McGibney, D. Botvich

11:40 **Towards Semantic Modeling of Intentional Pervasive Information Systems**
S. Najjar, M. Kirsch-Pinheiro, C. Souveyet

5th International Workshop on Web APIs and Service Mashups

<http://mashups2011.aifb.kit.edu/>

Wednesday 14.9.2011
Room 351

Chairs: Agnes Koschmider
Erik Wilde
Christian Zirpins

Service computing and Web 2.0 are converging into a programmable as well as composable Web. This development provides the foundation for Service Mashups — compositions of Web APIs, Web content and Web data sources. The result is a novel class of diversified, agile and interactive software systems that provide rich user experience and allow new fields of application. However, the integration of service computing and Web 2.0 technologies exposes various complexities like programming models and methodologies, service models that are well-suited for mashups, platforms and ergonomics in different operational contexts, as well as economic and social environments. Addressing some or all of these issues is an ongoing area of research and innovation, as new platforms for service delivery and service implementation constantly enter the marketplace. Mashups 2011 continues the tradition of four previous events (2007 in Vienna, 2008 in Sydney, 2009 in Orlando, and 2010 in Cyprus) that not only offer a broad range of papers in this space, but also present keynote speakers from leading industry groups currently offering mashup tools and platforms.

8:30-9:30 **Keynote: Socially Enhanced Services Computing**
Auditorium Shahram Dustdar

10:00-11:45 **Telco Service Mashups in IMS Networks**
Pierpaolo Baglietto, Federico Ballabio, Massimo Maresca and Michele Stecca.
Reliable Metering of Commercial Service Mashups
Christian Zirpins, Elmar Jakobs and Volker Kuttruff
Dealing with Collaborative Tasks in Process Mashups
Victoria Torres, Jose Manuel Pérez, Agnes Koschmider and Florian Daniel.

13:15-15:15 **ToMaTo: A Trustworthy Code Mashup Development Tool**
Jian Chang, Krishna K. Venkatasubramanian, Andrew West, Sampath Kannan,
Oleg Sokolsky, Myuhng Joo Kim and Insup Lee.
Towards Automated Service Quality Prediction for Development of Enterprise Mashups
Zoya Durdik, Jens Drawehn and Matthias Herbert
Semantics-Based Discovery, Selection and Mediation for Presentation-Oriented Mashups
Stefan Pietschmann, Carsten Radeck and Klaus Meißner.
Simplifying mashup component selection with combined similarity and social-based techniques
Boris Tapia, Romina Torres and Hernan Astudillo

15:45-17:00 Demo Session

2nd International Workshop on Data Visualization and Integration on the Web

<http://dataview.como.polimi.it/>

Wednesday 14.9.2011
Room 402

Chairs: Sara Comai
Alessandro Bozzon
Maira Norrie

Recent years witnessed a proliferation of data providers available on the Web, especially in the form of Web services. This trend is associated with the increasing availability of a wide spectrum of high-level data integration tools - such as mash-up platforms - that enabled users to develop novel applications and business scenario. As the richness and value of data increases, applications must provide users with visualizations and interaction paradigms that leverage properties such as the underlying data relationships, source type, provenance, and quality. This is a major change of paradigm with respect to traditional documents integration and navigation, as the interaction with data object repositories proved to be a challenging task for application developers. At this purpose, cross fertilization between different disciplines is mandatory: existing approaches for Web service engineering, integration and composition should be merged with data visualization and interaction methodologies at the purpose of identifying the best interaction and visualization paradigms on data-centric Web Services. The goal of the DATAVIEW 2011 workshop is to gather researchers and practitioners in the diverse fields related to the integration, interaction and visualization of data to explore the feasibility of using and combining different approaches to create effective data-centric Web-service based applications.

8:30-9:30 **Keynote: Socially Enhanced Services Computing**
Auditorium Schahram Dustdar

13:15 Welcome and Opening

13:20 **Web-Based Multi-View Visualizations for Aggregated Statistics**
Daniel Hienert, Benjamin Zapilko, Philipp Schaer and Brigitte Mathiak.

13:50 **Query Splitting Techniques and Search Service Recommendation for Multi-domain Natural Language Queries**
Alessandro Bozzon and Marco Brambilla.

14:20 **Use of Tag Clouds to support the Discovery and Inspection of Information Services**
Stefania Leone, Matthias Geel and Maira C. Norrie.

International Workshop on Quality Assurance for Service-based Applications

<http://www.inf.usi.ch/phd/bianculli/qasba2011/>

Wednesday 14.9.2011
Room 321

Chairs: Domenico Bianculli
Sam Guinea
Andreas Metzger
Andrea Polini

The service-oriented computing paradigm has been widely adopted in enterprises as a mean to implement distributed computing solutions. These solutions are realized as service-based applications (SBAs), by integrating heterogeneous software services, usually developed, controlled and owned by different organizations. Given the availability of mechanisms for run-time service discovery and binding, the service-oriented paradigm fosters a further level of dynamicity where service integration emerges at run time and evolves over time. Nevertheless run-time integration of services owned and controlled by different organizations affects the notion of correctness, dependability and quality of SBAs. This poses a challenge for the definition of new methodologies and techniques for the quality assurance process of this class of software. The quality assurance process has to span over the entire life cycle of a service-based application, from the design phase to the execution phase through intermediate phases such as deployment, to detect errors as early as possible. The QASBA 2011 workshop will be an opportunity for participants to discuss the current state of the art and to advance ideas for applying quality-assurance practice in the next generation of service-based applications.

8:30-9:30 Keynote: **Socially Enhanced Services Computing**
Auditorium Shahram Dustdar

10:00-12:00 **Using Vector Clocks to Monitor Dependencies among Services at Runtime**
Daniele Romano and Martin Pinzger.
Protocol Compatibility Notations for Service Integration Testing
Francesco De Angelis, Daniele Fanì and Alberto Polzonetti.
Yet Another Meta-Model to specify Non-Functional Properties
Antinisca Di Marco, Claudio Pompilio, Antonia Bertolino, Antonello Calabrò, Francesca Lonetti and Antonino Sabetta.
A Framework-based Runtime Monitoring Approach for Service-Oriented Software Systems
Cuiting Chen, Andy Zaidman and Hans-Gerhard Gross.

13.30-15.10 **CLAM: Cross-layer Adaptation Manager for Service-Based Applications**
Asli Zengin, Annapaola Marconi and Marco Pistore.
SLAs for Cross-layer Adaptation and Monitoring of Service-Based Applications: A Case Study
Konstantinos Bratanis, Dimitris Dranidis and Anthony J. H. Simons.
Access Policy Compliance Testing in a User Centric Trust Service Infrastructure
Guglielmo De Angelis, Tom Kirkham and Sandra Winfield.
Ensuring Trust in Service Consumption through Security Certification
Michele Bezzi, Samuel Paul Kaluvuri and Antonino Sabetta

15:45-16:45 Invited Presentations

Thursday 15.9.2011
Auditorium

8:30-9:30

KEYNOTE

(Session Chair: Cesare Pautasso)

**Business Process Configuration in the Cloud:
How to Support and Analyze Multi-Tenant Processes?**

Wil van der Aalst

10:00-12:00

SESSION 1: SERVICE DESCRIPTION, DISCOVERY AND COMPOSITION

(Session Chair: Walter Binder)

Aligning Web Services with the Semantic Web to Create a Global Read Write Graph of Data

Markus Lanthaler and Christian Guetl.

Service Offer Discovery Using Genetic Algorithms

Maciej Zaremba, Tomas Vitvar, Sami Bhiri and Manfred Hauswirth.

Formal verification of Web Services composition using Linear Logic and the pi-calculus

Petros Papapanagiotou and Jacques Fleuriot.

A Two-Stage RESTful Web Service Composition Method Based on Linear Logic

Xia Zhao, Enjie Liu and Gordon Clapworthy

13:15-15:15

SESSION 2: SECURITY AND NON-FUNCTIONAL REQUIREMENTS

(Session Chair: Paul Grefen)

The Architecture of a Secure Business-Process-Management System in Service-Oriented Environments

Jens Müller and Klemens Böhm.

A Secure Proxy-Based Cross-Domain Communication for Web Mashups

Shun-Wen Hsiao, Yeali Sun, Meng Chang Chen and Fu-Chi Ao.

Whom to trust? - Generating WS-Security Policies based on Assurance Information

Ivonne Thomas, Robert Warschofsky and Christoph Meinel.

Composing Non-Functional Concerns in Web Services

Benjamin Schmeling, Anis Charfi, Rainer Thome and Mira Mezini.

15:45-17:15

SESSION 3: SERVICE WORKFLOWS

(Session Chair: Wolf Zimmermann)

A Learning Architecture for Scheduling Workflow Applications in the Cloud

Enda Barrett, Enda Howley and Jim Duggan.

An Online Provenance Service for Workflows for Distributed Metabolic Flux Analysis

Tolga Dalman, Michael Weitzel, Wolfgang Wiechert, Bernd Freisleben and Katharina Nöh.

Workflow Skeletons: Increasing Scalability of Scientific Workflows by Combining Orchestration and Choreography

Tino Fleuren, Joachim Goetze and Paul Müller.

Friday 16.9.2011
Auditorium

8:30-9:30

KEYNOTE

(Session Chair: Ulf Schreier)

The Fading Boundary between Development Time and Run Time

Carlo Ghezzi

10:00-12:00

SESSION 4: SERVICE LEVEL AGREEMENT

(Session Chair: Claus Pahl)

SLAMonitor: A System for Dynamic Monitoring of Adaptive Web Services

Nihita Goel, N.V Narendra Kumar and Rudrapatna Shyamasundar.

Cost Reduction Through SLA-driven Self-Management

André Lage Freitas, Nikos Parlavantzas and Jean-Louis Pazat.

Service Level Achievements - Distributed Knowledge for Optimal Service Selection

Jens Kirchner, Andreas Heberle, Jesper Andersson and Welf Löwe.

An Automatic Requirements Negotiation Approach for Business Services

Kyriakos Kritikos, Sylvain Kubicki and Eric Dubois.

15:45-17:15

SESSION 5: SERVICE TESTING AND PLANNING

(Session Chair: Gianluigi Zavattaro)

Automating the Generation of Web Service Testbeds using AOP

Lukasz Juszczuk and Schahram Dustdar.

An Agent-Based Solution to the Resource Allocation Problem in Emergency Situations

Aygul Gabdulkhakova, Birgitta König-Ries and Dmitry Rizvanov.

A Time Interval-Based Credit Reservation Approach for Prepaid Composite Services in Cloud Enviroments

Lei Xu and Erik Elmroth.

17:15-17:30

ECOWS 2011 Closing

(Session Chair: Gianluigi Zavattaro)

Smart Work Roadmap Tutorial for Business and IT

Peter Utzinger, IBM
Hans-Peter Hoidn, IBM

Thursday 15.9.2011 10:00
Room 351

This one day Smart Work Roadmap Tutorial for Business and IT will provide an overview of best practices for implementing Web Services. These best practices are derived from multiple customer engagements as well as experience reports and are addressing major areas that need to be covered for successful projects, mainly for Business Performance Optimization, Dynamic Business Process Management for End-to-End Process Automation, Enterprise Architecture Methods, Service-Oriented Architecture and Governance.

Background: Inhabiting the Smarter Planet

Global trends and economic conditions are affecting businesses around the world, and the pace of change is accelerating. Businesses must work smarter to survive and to succeed. Dynamic Enterprises are the heart of this smart work. They enable faster response to changing customer expectations and business demands. The workshop will outline how a roadmap for implementing a solution can be based on best practice for Business Process Management life cycle, Service Oriented Architecture practice, methodology, and governance.

How do smart businesses evolve to adapt and respond dynamically?

- Enable IT to rapidly meet changing business needs
- Focus on Dynamic Business Processes and Agile Models
- Modeling instead of Coding ("the best code is the code that needs not to be written")

The main goal of this tutorial is to investigate and prioritize major business initiatives and demonstrate how a roadmap can be developed for the upcoming journey to make businesses work smarter, which will lead to a concrete action plan. Attendees will be introduced both to design aspects and to the technology for identification and creation of services, SAAS cloud based modeling of business processes all the way down the route to deployment, management and monitoring, also including the component and operational model. They will learn how agile business models can be implemented and how to business users can be empowered to effectively respond to threats and opportunities. Attendees will see how operational efficiency can be raised and how costs can be optimized by documenting, deploying and continuously optimizing dynamic business processes.

Peter Utzinger is a Solution Architect with main focus on solution architectures and business process implementations in the world wide team of IBM Software Group.

Hans-Peter Hoidn is Executive IT Architect with a very strong architectural background doing architecture more than 15 years with a strong focus on Service-Oriented Architecture (SOA) and Enterprise Architecture (EA).

PhD Symposium

Friday 16.9.2011
Room 351

Chair: Wolf Zimmermann

The ECOWS 2011 PhD Symposium is an international forum for PhD students working in any of the areas addressed by the ECOWS conference. The main aim of the Symposium is to give PhD students an opportunity to present their research activity and perspectives, to critically discuss them with other PhD students and with established researchers in the area, and to get fruitful feedback and advices on their research activity. PhD students working in any area addressed by the ECOWS conference can submit a short report providing a clear statement of the problem they intend to address, motivating the interest and novelty of the underlying research challenges, demonstrating the ideas by examples, and describing the proposed research plan and expected results.

10:00-11:30 PhD SYMPOSIUM 1
(Session Chair: Kung-Kiu Lau)

A Framework for Service Composition by Recommendations from Service Executions

Chaman Wijesiriwardana, University of Zürich, Switzerland.

A Semi-Automatic Web Services Composition Framework for Smart Home Management

Abdaladhem Albreshene, University of Fribourg, Switzerland.

14:15-15:00 PhD SYMPOSIUM 2
(Session Chair: Wolf Zimmermann)

An Active Negotiation Model for Service Selection in Web Service Composition

Mahboobeh Moghaddam, University of Sydney, Australia

15:45-17:15 PhD SYMPOSIUM 3
(Session Chair: Thomas Gschwind)

User-controlled data sovereignty in the Cloud

Marc Mosch, Technische Universität Dresden, Germany

A Secure Cloud Gateway based upon XML and Web Services

Sebastian Graf, University of Konstanz, Germany

Industry Track

Friday 16.9.2011

10:00-12:00 SESSION 1: INDUSTRY TRACK PAPERS

Room 402 (Session Chair: Thomas Gschwind)

Integration Services Today - A qualitative study -- design and preliminary results
Martin Gebauer and Fred Stefan.

Enterprise Service Bus with USB-Like Universal Ports
Waseem Roshen.

Performance Evaluation of Mobile Web Services
Rabeb Mizouni, M. Adel Serhani, Rachida Dssouli, Abdelghani Benharref and Ikbal Taleb.

Systematic Reuse of Web Services through Software Product Line Engineering
Germán H. Alférez and Vicente Pelechano.

13:15-14:15 KEYNOTE

Auditorium (Session Chair: Olaf Zimmermann)

13 Years of SOA at Credit Suisse: Lessons Learned – Remaining Challenges
Stephan Murer

14:15-15:15 INVITED PRESENTATIONS

Auditorium (Session Chair: Olaf Zimmermann)

Smart Work: Industry Best Practices for Business & IT
Peter Utzinger and Hans-Peter Hoidn, IBM.

Barely Repeatable Processes: Challenge current software models and find a huge and unused source for business innovation and profit
Sigurd Rinde, Thingamy.

15:45-16:15 INVITED PRESENTATION

Room 402 (Session Chair: Achille Peternier)

**JBoss / Red Hat:
bridging the gap between web services technologies and real world needs**
Alessio Soldano, Red Hat.

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Ümit Yalçinalp	Adobe Systems, USA
Olaf Zimmermann	IBM Zurich Research Lab, Switzerland
Wolf Zimmermann	Universität Halle, Germany

Useful Information

Contact and Venue Address

ECOWS 2011
Faculty of Informatics
Università della Svizzera Italiana (USI)
via Giuseppe Buffi 13
CH-6900 Lugano
+41 079 500 9150

<http://ecows2011.inf.usi.ch>

local@ecows2011.inf.usi.ch

Follow the conference [@ecows2011](https://twitter.com/ecows2011)

Official twitter hashtag: **#ecows2011**

Internet Access

WiFi is freely available at the conference venue, ask for the password at the conference registration desk.

Lunch

Lunch is served from 12:00 until 13:15 at the Ristorante Canvetto Luganese (Via Rinaldo Simen 14) reachable within a short walk from the USI campus (see map). Make sure you bring your lunch coupons.

Registration

The conference onsite registration will be open on the first floor of the Faculty of Informatics (Dean's office) on Tuesday 13.9.2011 between 16:00-17:00. During the conference, on Wednesday and Thursday the registration desk will be open 8:00-8:45 in the entrance hall of the University main building. From 9:30-12:15 and 13:15-17:30 it will be in the auditorium hall. On Friday, the registration desk will be open from 8:00-12:15 in the auditorium hall and from 13:15-17:30 on the first floor of the Faculty of Informatics (Dean's office).

Full Registration gives access to the whole conference program: the research and industry tracks, any of the satellite workshops, the tutorial and the PhD Symposium. It also includes lunches and coffee breaks on the 3 days of the conference, as well as the social events: reception (14.9.2011) and banquet (15.9.2011) together with one copy of the printed proceedings.

Workshop/Single Day-Only Registration gives access to attend the conference and any workshop for one day, including lunch and coffee breaks, but does **not** include the social events or the printed proceedings.

Guest Tickets

Tickets for guests that would like to attend the conference welcome boat tour and reception (CHF 75) and the conference banquet (CHF 150) are available at the reception desk.

Extra Proceedings

Subject to availability, extra proceedings copies can be purchased (50 CHF) at the registration desk.

Emergency Numbers

ECOWS: +41 079 500 9150
USI Campus Security: +41 058 666 4730
Ambulance: 144
Police: 117

Social Events

Wednesday 18:00 **Welcome Boat Tour**

The ECOWS2011 Welcome reception will begin with a boat tour on the Lugano lake and continue with an apero at the Ristorante Parco Ciani. The boat leaves at **18:00** from Castagnola. The pier is located in Via Castagnola 12 within the shipyards of the Lugano Lake Navigation Company and is reachable from the University with a 15-20 minute walk along the river Cassarate (see maps).



Wednesday 19:00 **Welcome Reception**

The ECOWS2011 Welcome reception will begin after the boat tour at the Ristorante Parco Ciani, which is located next the Parco Ciani by the lake at the Lugano Conference Center (Palazzo dei Congressi, Piazza Indipendenza 4, see maps).

Thursday 18:00 **ECOWS Banquet**



The ECOWS2011 Banquet will be held at the UNESCO World Heritage site Castelgrande in Bellinzona.

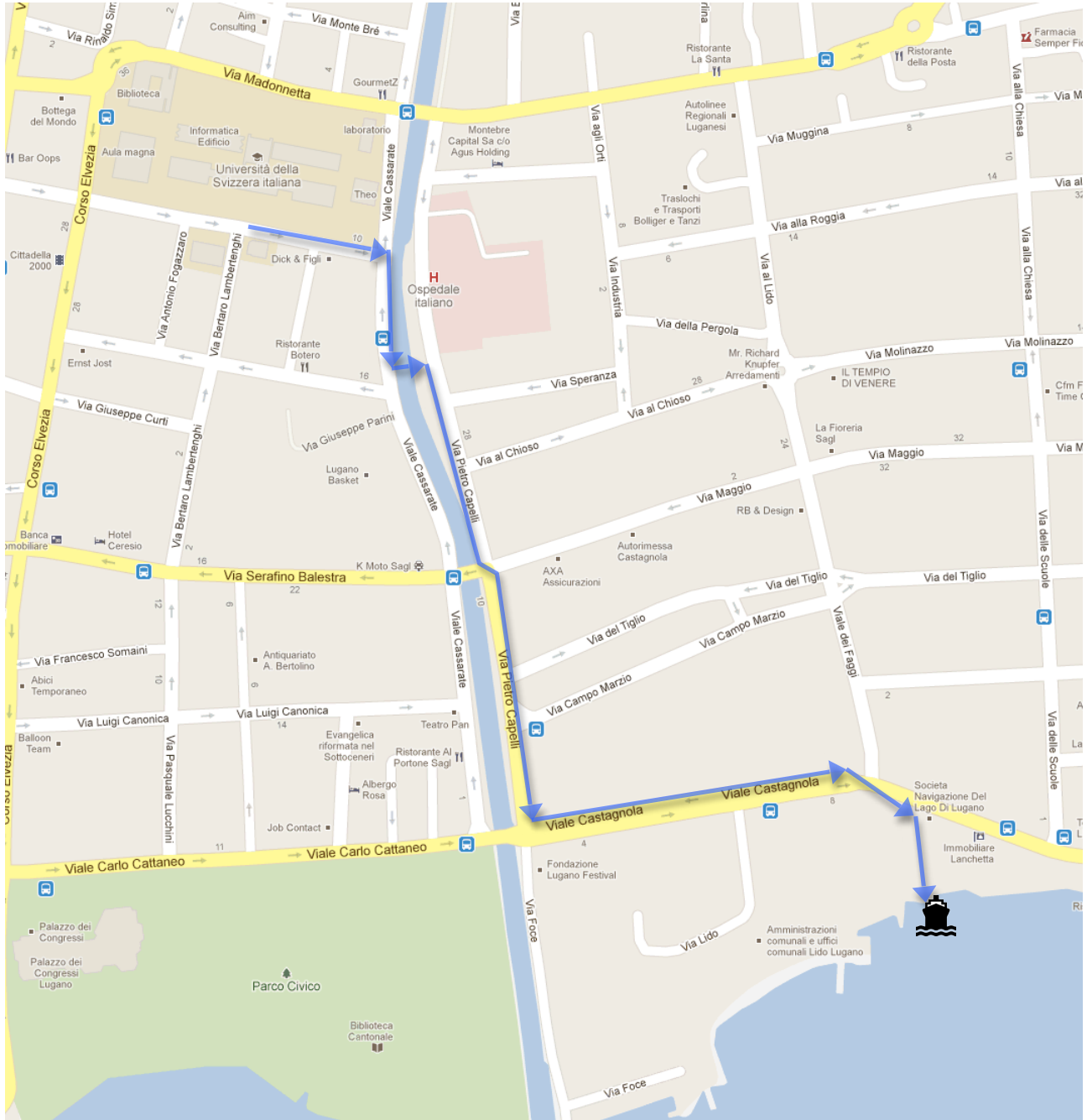
Transportation to the castle for the conference delegates will leave USI Lugano at **18:00**. The meeting point is in front of the USI main building (via Buffi 13).

Once the bus reaches Bellinzona, the castle will be reachable either by elevator or by a short uphill walk along steep footpaths under the castle walls. Everyone reaching the castle's keep will be awarded a succulent meal accompanied by an inspiring wine.

The bus back to Lugano will return from Bellinzona at 22:00 and arrive in Lugano at approx. 22:30.

Maps

Getting to the Welcome Boat Tour (Wednesday)



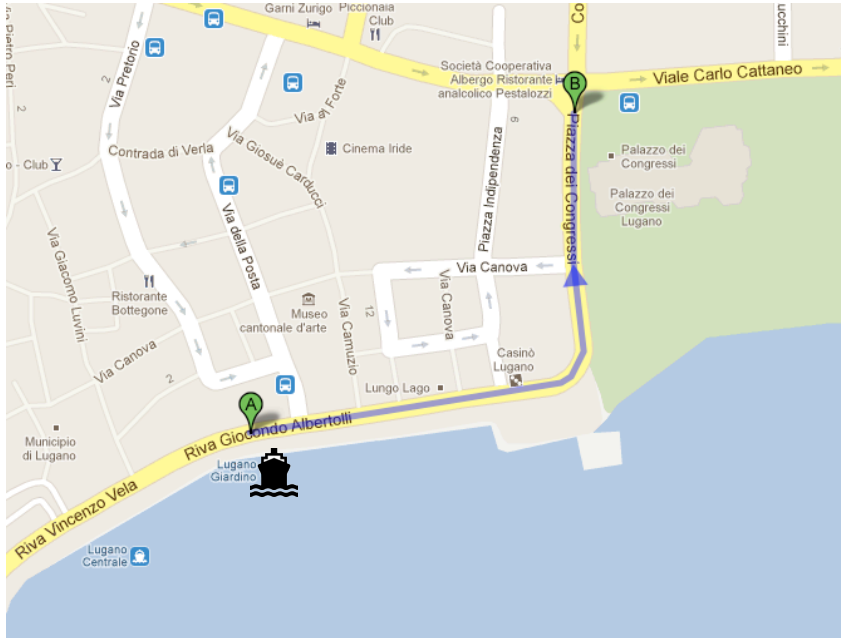
The ECOWS Welcome boat tour leaves on Wednesday 14.9.2011 at **18:00** from the Castagnola pier. To get on the boat, please show your boat tour tickets.

The pier is located in Via Castagnola 12 within the shipyards of the Lugano Lake Navigation Company and is reachable from the University with a 15-20 minute walk along the river Cassarate.

A group of ECOWS student volunteers will guide you to the boat. The meeting point is in front of the USI main building at 17:30.

Maps

Welcome Reception (Wednesday)

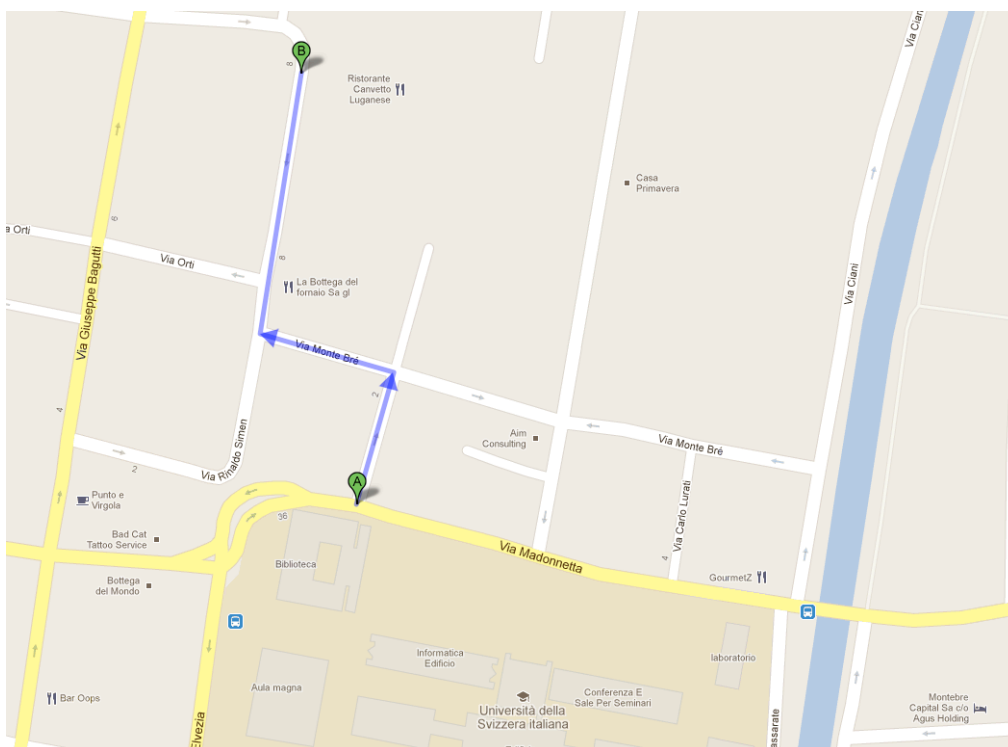


After the boat tour, the ECOWS2011 Welcome reception will be held starting at 18:45 on Wednesday 14.9.2011 at the Ristorante Parco Ciani, Piazza Indipendenza 4 in the Lugano Conference Center (Palazzo dei Congressi).

Please bring your tickets.

Lunch (Every Day)

The Conference Lunch will be served every day at the Ristorante Canvetto Luganese (Via Rinaldo Simen 14) reachable from the north side of the USI Library with a short walk. Please bring your lunch vouchers.

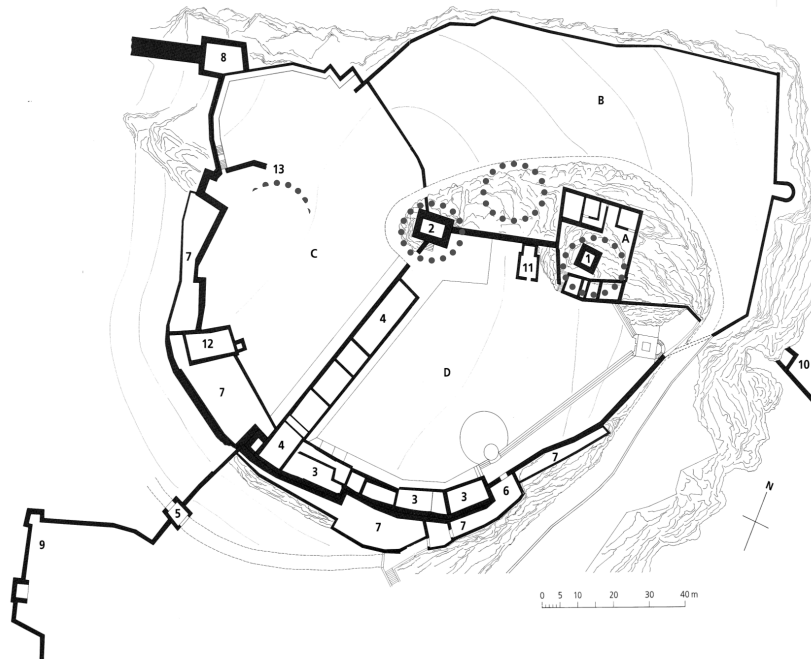


Maps

Castelgrande, Bellinzona (Thursday)

The banquet is in the Restaurant Castelgrande (4).

The elevator entrance (10) is in Piazza del Sole right below the castle walls.



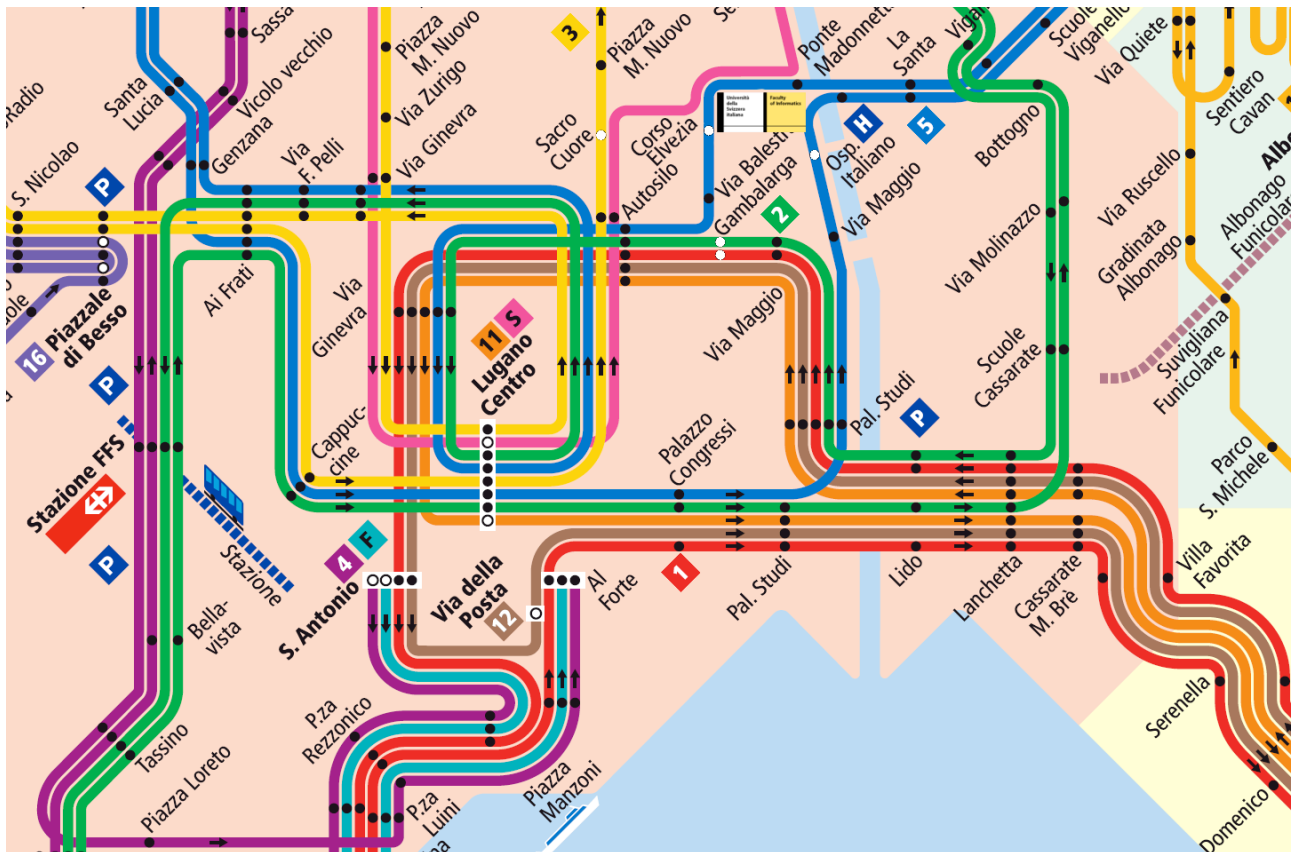
Transportation to the castle will leave in front of the USI main building at 18:00 on Thursday.
Do not forget your banquet ticket.



Transportation

Reaching the USI Campus

The USI campus and Lugano have very limited parking space available. Whereas most hotels in the Lugano center are within walking distance to the University campus, it is also possible to reach the University by bus.



Tickets for public transportation must be purchased at bus stops. Most vending machines require exact change.

Single trip: 1.60 CHF
24 hour ticket: 5.00 CHF
Weekly pass: 20.00 CHF

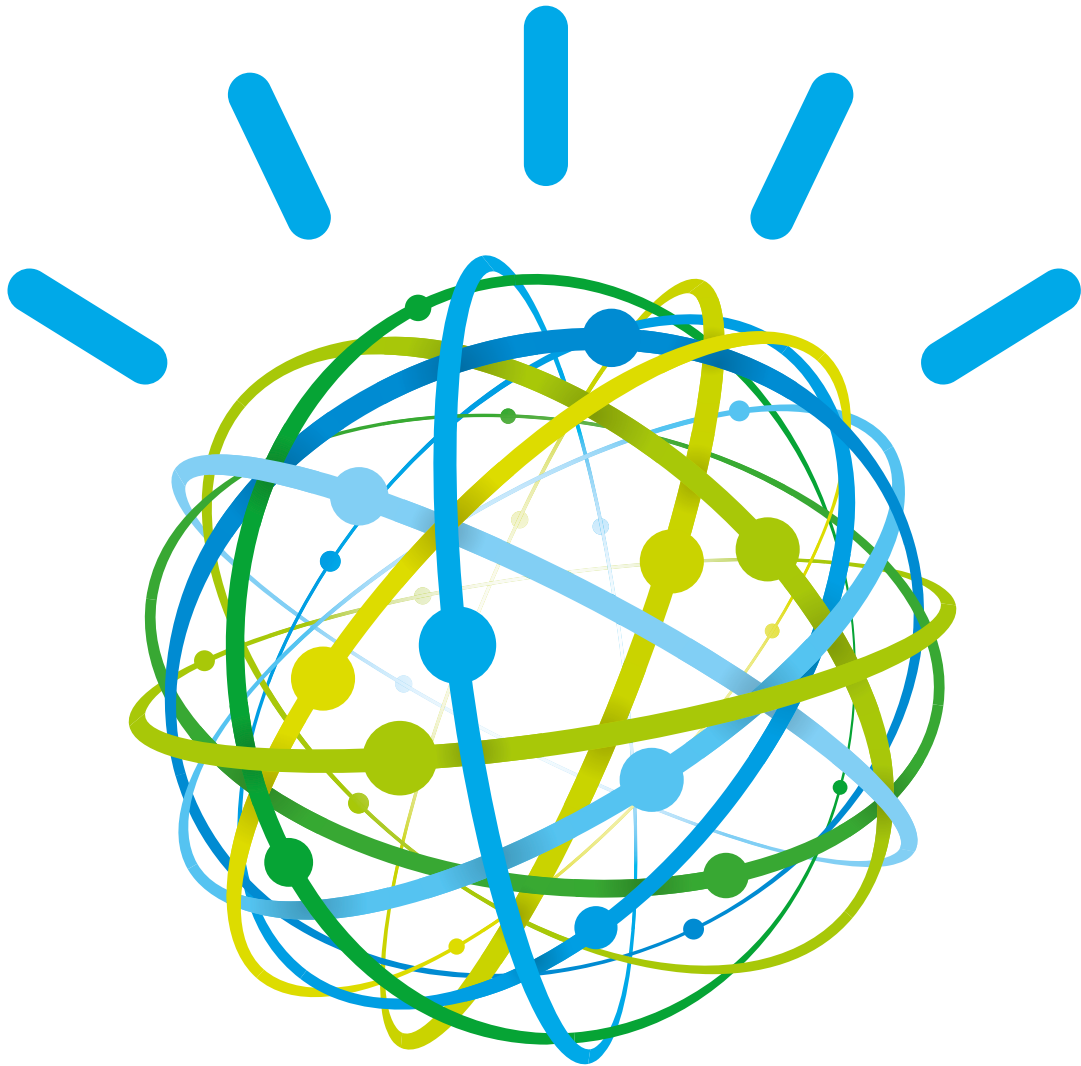
For schedules and maps see <http://www.tpls.ch/> (Italian)
or <http://www.sbb.ch/> (English).

You can also use the bike sharing system (Velopass), as one of its bike stations is on the USI campus. Day passes are available for 6 CHF at the tourist office.

See <http://www.velopass.ch/> for more information.

Bus Stops Nearest USI campus:

Line	Direction	Stop
3	Pregassona	Sacro Cuore
5	Viganello	Ospedale Italiano
5	Veza	Corso Elvezia
2	Paradiso	Gambalarga
1	Paradiso	Gambalarga



Watson wins. A win for humankind!

The contest between the IBM computer Watson and the two former champions on American TV quiz Jeopardy! has been decided. Watson won.

But the clear winner is humankind. We can use Watson's advances in the interpretation of unstructured content and natural language to overcome really great challenges in the world.

We are looking for ways to apply Watson's skills to the rich and varied languages of health-care, finance, law and academia. In so doing, we help people, organizations and companies to understand data, and to answer questions they were previously unable to.

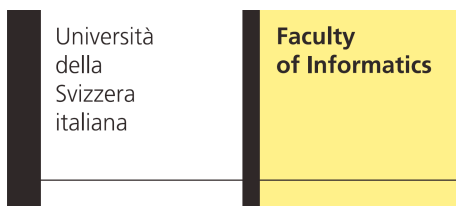
We believe that the technology underlying Watson will help us make our lives, our work and our society smarter. It's a win-win situation. **Let's Build A Smarter Planet.**

ibm.com/ch/watson





Schweizer Informatik Gesellschaft
Société Suisse d'Informatique
Società Svizzera per l'Informatica
Swiss Informatics Society



9th IEEE European Conference on Web Services (ECOWS 2011)
14-16 September 2011, Lugano, Switzerland
<http://ecows2011.inf.usi.ch/>