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### Introduction



Valentina Presutti General Chair

WELCOME TO ESWC IN CRETE! Καλώς ήρθατε στο ESWC στην Κρήτη

After the nice experience in Montpellier, we are back to the sunny Crete, where an exciting conference program is waiting for us!

The main scientific program of the conference comprises 50 paper presentations (41 research and 9 in-use) completed by demonstration and poster presentations. In addition, the conference program includes 13 workshops, 8 tutorials, as well as a PhD Symposium (with 11 paper presentations), the AI Mashup Challenge, the LinkedUp Challenge, the Semantic Web Evaluation Track (featuring 3 challenges), the EU Project Networking Session and a panel on "Data Protection and Security on the Web". Last but not least, we will attend three inspiring and visionary keynote presentations.

This year edition can be described with the following keywords: visionary, advancing, pioneering, trendy.

Visionary, as we have three keynote speakers that bring three very different and inspiring views on the future of the Semantic Web. Steffen Staab (Universität Koblenz-Landau), advocating for the need of new programming paradigms for dealing with the nature

of the Semantic Web; Luciano Floridi (University of Oxford), who challenges our community with a vision of a Semantic Web as a means for predicting and manipulating autonomous choices; and Lise Getoor (University of Maryland), who shows us how optimization methods can support turning large-scale data into knowledge.

Advancing, as we have extended an already excellent scientific program with a new track named "Semantic Web Evaluation" (SemWebEval). The aim of this track is to provide a clear reference to the state of the art on specific Semantic Web tasks, and favor the spreading of proper empirical approaches for their future advancement. SemWebEval features three challenges, each of which rigorously defines a number of Semantic Web tasks and accompany them with their evaluation datasets and criteria. This year we have had a total of 10 tasks addressing three main topics: Semantic Publishing, Concept-Level Sentiment Analysis, and Linked Open Data-enabled Recommender Systems.

The description of tasks, datasets and evaluation criteria together with their best results will be published as part of a Semantic Web Journal special issue.

Pioneering, as we have decided to support workshops that address promising although yet not established topics such as "Semantic Web and Sentiment Analysis" and "Human-Semantic Web Interaction"; as well as emerging topics such as "Finance and Economics on the Semantic Web", and "Semantic Publishing". We have also introduced a unique official hashtag for each paper: you can find it within the papers or as a built-in feature of "ESWC Conference Live": A mobile app which supports you in scheduling your conference attendance and performing your social interaction within the conference community. Do not forget to download it and provide your feedback!

Trendy, as we did not overlook to properly address the latest Tim Berners-Lee's call for an internet users' "bill of rights". In fact, ESWC 2014 program includes a panel dedicated to "Data Protection and Security on the Web".

As General Chair, I would like to thank everybody that has been involved in the organization of ESWC 2014. Most importantly, I would like to thank the PC Chairs Claudia d'Amato and Fabien Gandon for their excellent work in compiling a high quality and varied scientific program, and thanks to all Track Chairs and reviewers for their great work in supporting PC Chairs.

Special thanks go to PhD Symposium Chairs, Mathieu d'Aquin and Steffen Staab, who have realized an innovative format aimed at ensuring proper mentoring to our promising students. We have a great selection of workshops and tutorials thanks to the excellent work of our Workshop Chair Harald Sack and our Tutorial Chair Nathalie Aussenac-Gilles. Thanks to our EU Project Networking Session Chairs and to our great Keynote Speakers.

I would like to dedicate a special thank to Milan Stankovic and all Challenges Chairs, who have accepted and successfully achieved the organization of the new challenging "Semantic Web Evaluation" track. We are also very happy to host the AI Mashup challenge and the LinkedUp Challenge, which contribute bringing new ideas and exciting application demos.

Thanks to STI International for supporting the conference organization, to Ioan Toma (from STI) for taking care of the budget, and thanks also to our Local Organizer Irini Fundulaki. Youvivo GmbH deserves a special acknowledgement, in particular Martina Hartl, for the great professional support to the conference organization.

I am very grateful to Silvio Peroni, who has spread news about ESWC timely and effectively, to Serge Tymaniuk who has administered the web site, and to our Sponsor Chairs Axel Ngonga and Achim Rettinger for their precious help in collecting sponsorships for the conference.

I want to point out the remarkable job of the Proceedings Chair Anna Tordai and of the Semantic Technologies Coordinators: Luca Costabello, Maribel Acosta Deibe, Anna Lisa Gentile, Alessio labichella, and Andrea Giovanni Nuzzolese; who have developed our great "ESWC Conference Live" mobile app.

Thanks to our sponsors for their trust in ESWC.

May ESWC 2014 be inspiring for your future research!

## **ESWC2014 Sponsors and Supporters**

































### **Diamond Sponsor**



**PLANETDATA** | The PlanetData project aims to establish a sustainable European community of researchers that supports organizations in exposing their data in new and useful ways. PlanetData pushes forward the state-of-the-art in large-scale data management and its application to the creation of useful, open data sets. This is motivated by the increasing reliance of business on large public data; the uptake of open data principles in many vertical sectors; and the need of research communities to make sense out of petabytes of scientific data, to describe and expose this data in ways that encourage and enable collaboration.

http://planet-data.eu/

### **Platinum Sponsors**



**BIG** | Big Data is an emerging field where innovative technology offers alternatives to resolve the inherent problems that appear when working with huge amounts of data, providing new ways to reuse and extract value from information.

Big Data Public Private Forum (BIG) is working towards the definition and implementation of a clear strategy that tackles the necessary efforts in terms of research and innovation, while also it provides a major boost for technology adoption and supporting actions for the successful implementation of the Big Data economy.

Building an industrial community around Big Data in Europe is the priority of this project, together with setting up the necessary collaboration and dissemination infrastructure to link technology suppliers, integrators and leading user organizations.

http://big-project.eu/

## **Platinum Sponsors**



**LINKEDUP** | The LinkedUp project <a href="http://linkedup-project.eu/">http://linkedup-project.eu/</a> is a FP7 Support Action which pushes forward the exploitation and adoption of public, open data available on the Web, in particular by educational organisations and institutions. To address these goals, LinkedUp provides a range of activities to support and promote innovative success stories which exploit large-scale Web data in educational scenarios as part of robust applications and tools. Activities include the organisation of the LinkedUp Challenge

(http://www.linkedup-challenge.org) and the development of evaluation techniques for comparing and assessing data-driven application and tools. Dataset collection, cataloging and publishing activities have resulted in the LinkedUp Data Catalog (http://data.linkededucation.org/linkedup/catalog/), a repository and catalog of well-described and assessed datasets for educational purposes. The LinkedUp Catalog supports participants of the data challenge, as well as interested data consumers and application developers in general. The overall aim is to facilitate the development of innovative applications produced by the LinkedUp community and challenge participants and their deployment in real-world use case scenarios. A collection of suitable use cases have been collected by the LinkedUp consortium and representatives of associated organisations, including representatives from renowned industrial, academic and higher education institutions such as Elsevier, the BBC, or the Commonwealth of Learning.. http://linkedup-project.eu <a href="http://linkedup-project.eu">http://linkedup-project.eu</a> <a href="http://linkedup-project.eu">http://linkedup-proj

### **Gold Sponsors**



**ANNOMARKET** | AnnoMarket.com is a new online marketplace for text analytics services, enabling anyone from large organisations to SMEs and individuals to buy and sell high-quality text processing services. The platform is entirely cloud-based and users pay for everything on a cost-effective, pay-as-you-go basis.

AnnoMarket provides a wide and growing selection of text analysis pipelines that you can use via simple REST APIs for either on-line or batch processing of documents.

Come and visit the stand to learn more and pick up a free credit voucher worth up to 10,000 API calls."

## **Gold Sponsors**



LDBC | Non-relational data management is emerging as a critical need for the new data economy based on large, distributed, heterogeneous, and complexly structured data sets. This new data management paradigm also provides an opportunity for research results to impact young innovative companies working on new RDF and graph data management technologies to start playing a significant role in this new data economy. Standards and benchmarking are two of the most important factors for the development of new information technology, yet there is still no comprehensive suite of benchmarks and benchmarking practices for RDF and graph databases, nor is there an authority for setting benchmark definitions and auditing official results. Without them, the future development and uptake of these technologies is at risk by not providing industry with clear, user-driven targets for performance and functionality. The Linked Data Benchmark Council (LDBC) project is creating the first comprehensive suite of open, fair and vendor-neutral benchmarks for RDF/graph databases together with the LDBC foundation which will define processes for obtaining, auditing and publishing results. The core scientific innovation of LDBC is therefore to define meaningful benchmarks derived from a combination of actual usage scenarios combined with the technical insight of top database systems researchers and architects in the choke points of current technology. LDBC brings together a broad community of researchers and RDF and graph database vendors to establish an independent authority, the LDBC foundation, responsible for specifying benchmarks, benchmarking procedures and verifying/publishing results. The forum created will become a long-surviving, industry supported association similar to the TPC. Vendors and user organisations will participate in order to influence benchmark design and to make use of the obvious marketing opportunities.

http://www.ldbc.eu/



**VIDEOLECTURES.NET** | VideoLectures.NET is an award-winning free and open accessed ucational video lectures repository. The lectures are given by distinguished scholars and scientists at the most important and prominent events like conferences, summer schools, workshops and science promotional events from many fields of Science. The portal is aimed at promoting science, exchanging ideas and fostering knowledge sharing by providing high quality didactic contents not only to the scientific community but also to the general public. All lectures, accompanying documents, information and links are systematically selected and classified through the editorial process taking into account also users' comments. **http://videolectures.net/** 

### **Gold Sponsors**



**LINKEDTV** | As Television and the Web converge – television content is transmitted digitally, possibly over IP, to devices which are equally Web capable, while Web content includes audiovisual streams consumed over connected devices in the same manner as classical television – we note that the actual meaning of 'television' changes. On a connected device, (broadcast) television content, other audiovisual content and other Web content may be consumed in parallel or sequence, and the fact that something is 'television' or 'Web' blurs in the consumers' awareness. Is YouTube playing on a SmartTV now television? Is a catchup TV stream on the laptop still television?

**Linked Television** is a vision of future television consumption. Here TV and Web content is seamlessly interlinked, for example while watching the news the viewer is getting background information on the stories at their fingertips; it's seeing a painting in a TV program and being able to identify the artist and the museum where it hangs. It's facilitating what the Second Screen generation is already doing, but now bringing this within the same digital ecosystem, so that content owners retain the connection with the viewer and control about the information being linked with their media.

http://www.linkedtv.eu



**MEDIAMIXER** | MediaMixer is an EU funded action to support organisations in enhancing their media contents to create greater value and extending reach across customers, consumers and the media value chain. MediaMixer promotes semantic multimedia fragment technologies which can be used by enterprises to fragment their media assets, annotate those fragments and use these annotations for more flexible media retrieval and re-use in new contexts.



**PRELIDA** | The PRELIDA project targets the particular stakeholders of the Linked Data community, including data providers, service providers, technology providers and end user communities. These stakeholders have not been traditionally targeted by the Digital Preservation community, and are typically not aware of the digital preservation solutions already available. Hence an important task of PRELIDA is to raise awareness of existing preservation solutions and to facilitate their uptake.

At the same time, the Linked Data cloud has specific characteristics in terms of structuring, interlinkage, dynamicity and distribution, that pose new challenges to the preservation community. PRELIDA organises in-depth discussions among the two communities to identify which of these characteristics require novel solutions, and to develop road maps for addressing the new challenges.

http://www.prelida.eu/

### **Bronze Sponsor**



FLUID OPERATIONS | fluid Operations® (fluidOps) is an innovative software company headquartered in Walldorf, Germany. Its focus lies on the research and development of novel technologies for intelligent cloud and data management in the enterprise. With the Information Workbench®, fluidOps delivers a highly customizable platform for Linked Data and Big Data management and solution development. This includes support for the semantic integration of heterogeneous data sources across the borders of individual domains, collaborative knowledge acquisition and augmentation, semantic search, business intelligence and analytics, as well as data visualization and exploration. fluidOps' Conference Explorer app won the Linked Data-a-Thon at the ISWC 2011. http://www.fluidops.com/



**iSOCO** | iSOCO, Intelligent Software Components S.A. (www.isoco.com) is a technology company founded in 1999, becoming the first company in Spain and one of the first in Europe to offer solutions based on Semantic Web technologies. Currently, iSOCO employs around 100 persons in offices in Barcelona, Madrid, Valencia, and Pamplona. iSOCO has ample experience in international R&D activities, especially in the different EU Frame Programmes, and is successful in transferring research results in the field of Semantic Web technologies to the market. To this purpose iSOCO Lab, the Research branch of the company, was created in 2001 with three main objectives: maintain the technological level of the company, foster innovation to approach the market through new products, and pave the way for the application of new technologies to business.

## Student Grant | Best Paper Award | Best Demo Award



FORGE | The Future Internet Research and Experimentation (FIRE) facilities are a world class infrastructure supporting European research into new services and protocols associated with the next generation Internet. Open Educational Resources (OERs) have recently made headlines in the guise of MOOCs (Massive Open Online Courses) which are giving millions of students worldwide access to the highest quality education. The FORGE project will produce OERs supported by a combination of Linked Data technologies and rich multimedia interactive eBooks to turn FIRE into a learning resource. Specifically, in the future FORGE students will be able to setup and run large-scale Internet experiments on the FIRE facilities from within an eBook. Educators and students will be able to find and use course and experimental lab materials through our semantically marked up repository. See more at: http://ict-forge.eu/

### **Best Paper Award**

### VAHOO! LABS

**Yahoo** | Yahoo Labs is pioneering the new sciences underlying the Web. As the center of scientific excellence here at Yahoo, we deliver both fundamental and applied scientific leadership, publish research and create new technologies that power Yahoo's products. We're responsible for big inventions—and our goals are nothing short of inventing the future of the Internet and creating the next generation of businesses for Yahoo.

### Video Recording



**XLIKE** | The goal of the XLike project is to develop technology to monitor and aggregate knowledge that is currently spread across mainstream and social media, and to enable cross-lingual services for publishers, media monitoring and business intelligence.

The aim is to combine scientific insights from several scientific areas to contribute in the area of cross-lingual text understanding. By combining modern computational linguistics, machine learning, text mining and semantic technologies we plan to deal with the following two key open research problems: to extract and integrate formal knowledge from multilingual texts with cross-lingual knowledge bases, and to adapt linguistic techniques and crowdsourcing to deal with irregularities in informal language used primarily in social media.

The developed technology will be language-agnostic, while within the project we will specifically address English, German, Spanish, Chinese and Hindi as major world languages and Catalan and Slovenian as minority languages.

www.xlike.org



**XLIME** | xLiMe is a research project (EU-FP7) dedicated to fusing the knowledge from different dimensions of media content. It proposes to extract knowledge from different media channels and languages and relate it to cross-lingual, cross-media knowledge bases. By doing this in near real-time we will provide a continuously updated and comprehensive view on knowledge diffusion across media, e.g., from European communities like Catalonia to worldwide content in English. By combining speech recognition, natural language processing, machine learning and semantic technologies we will advance key open research problems, by: 1. extracting machine-readable knowledge (entities, sentiment, events and opinions) from multilingual, multimedia and social media content and integrate it with cross-lingual, cross-media knowledge bases, 2. searching this knowledge with structured and unstructured queries in near real-time, 3. monitoring its provenance, consumption and diffusion and 4. analysing the interdependency between media exposure and behavioural patterns.

www.xlime.eu

### **Keynote Speakers**



**Steffen Staab,** Institute for Web Science and Technologies - WeST, Universität Koblenz-Landau, DE

Steffen studied in Erlangen (Germany), Philadelphia (USA) and Freiburg (Germany) computer science and computational linguistics. Afterwards he worked as researcher at Univ. Stuttgart/ Fraunhofer and Univ. Karlsruhe, before he became professor in Koblenz. In his research career he has managed to avoid almost all good advice that he now gives to his team members. Such advise includes focusing on research (vs. company) or concentrating on only one or two research areas (vs. considering ontologies, semantic web, social web, data engineering, text mining, peer-to-peer, multimedia, HCI, services, software modelling and programming and some more). Though, actually, improving how we understand and use text and data is a good common denominator for a lot of Steffen's professional activities.

Website: http://userpages.uni-koblenz.de/~staab/

### PROGRAMMING THE SEMANTIC WEB

The Semantic Web changes the way we deal with data, because assumptions about the nature of the data that we deal with differ substantially from the ones in established database approaches. Semantic Web data is (i) provided by different people in an ad-hoc manner, (ii) distributed, (iii) semi-structured, (iv) (more or less) typed, (v) supposed to be used serendipitously. In fact, these are highly relevant assumptions and challenges, because they are frequently encountered in all kind of datacentric challenges — also in cases where Semantic Web standards are not in use. However, they are only partially accounted for in existing programming approaches for Semantic Web data including (i) semantic search, (ii) graph programming, and (iii) traditional database programming approaches.

The main hypothesis of this talk is that we have not yet developed the right kind of programming paradigms to deal with the proper nature of Semantic Web data, because none of the mentioned approaches fully considers its characteristics. Thus, I want to outline empirical investigations of Semantic Web data and recent developments towards Semantic Web programming that target the reduction of the impedance mismatch between data engineering and programming approaches.



**Prof Luciano Floridi,** Oxford Internet Institute, University of Oxford, UK

Luciano Floridi is Professor of Philosophy and Ethics of Information at the University of Oxford, Senior Research Fellow at the Oxford Internet Institute, and Governing Body Fellow of St Cross College, Oxford. He is also Adjunct Professor, Department of Economics, American University, Washington D.C. Among his recognitions, he has been awarded the Cátedras de Excelencia Prize by the University Carlos III of Madrid (2014-15), was the UNESCO Chair in Information and Computer Ethics and Gauss Professor of the Academy of Sciences in Göttingen. He is a recipient of the APA's Barwise Prize, the IACAP's Covey Award, and the INSEIT's Weizenbaum Award. He is an AISB and BCS Fellow, Editor in Chief of Philosophy & Technology and of the Synthese Library. In 2012, he was Chairman of EU Commission's "Onlife Initiative". His most recent books are: The Fourth Revolution - How the infosphere is reshaping human reality (Oxford University Press, 2014), The Ethics of Information (Oxford University Press, 2013), The Philosophy of Information (Oxford University Press, 2011), The Cambridge Handbook of Information and Computer Ethics (editor, Cambridge University Press, 2010), and Information: A Very Short Introduction (Oxford University Press, 2010).

## COORDINATION, SEMANTICS, AND AUTONOMY

The lecture is divided into four parts. In the first part, I offer a brief and simple introduction to four well-known senses in which different scientific fields speak of complexity, namely state complexity, Kolmogorov complexity, computational complexity, and programming complexity. I then suggest an intuitive way in which they can all be linked in a conceptual, unified view. Against this background, in the second part, I outline a new concept of complexity, which I shall call coordination complexity. This completes the unified view. I then argue, in the third part, that the semantic web helps us dealing with problems with increasingly high degree of coordination complexity, which require the mobilisation of whole systems to be tackled. In the last and concluding part, I highlight one of the consequences of the resolution of problems with high degree of coordination complexity: the predictability and manipulability of autonomous choices.



**Lise Getoor,** University of Maryland, US

Lise Getoor is a Professor in the Computer Science Department at the University of California, Santa Cruz. Prior to that, she was a Professor in the Computer Science Department at the University of Maryland, College Park (2001-2013). Her primary research interests are in machine learning and reasoning with uncertainty, applied to graphs and semi-structured data. She also works in data integration, social network analysis and visual analytics. She has over 200 publications, eight best paper awards, an NSF Career Award, was PC co-chair for the 2011 International Machine Learning Conference (ICML), and is an Association for the Advancement of Artificial Intelligence (AAAI) Fellow. She received her Ph.D. from Stanford University in 2001, her M.S. from UC Berkeley, and her B.S. from UC Santa Barbara. Website: http://www.cs.umd.edu/~getoor

## COMBINING STATISTICS AND SEMANTICS TO TURN DATA INTO KNOWLEDGE

Addressing inherent uncertainty and exploiting structure are fundamental to turning data into knowledge. Statistical relational learning (SRL) builds on principles from probability theory and statistics to address uncertainty while incorporating tools from logic to represent structure. In this talk I will overview our recent work on probabilistic soft logic (PSL), a SRL framework for collective, probabilistic reasoning in relational domains. PSL is able to reason holistically about both entity attributes and relationships among the entities, along with ontological constraints. The underlying mathematical framework supports extremely efficient inference. Our recent results show that by building on state-of-the-art optimization methods in a distributed implementation, we can solve large-scale knowledge graph extraction problems with millions of random variables orders of magnitude faster than existing approaches.

# **Program Summary**

### **KEY: HIGHLIGHTED PAPER**

- 😊 = Candidate Best In-Use Paper
- 🖁 = Candidate Best Research Paper
- = Controversial Paper
- = Programm Committee Spotlight Paper

# Workshops, Tutorials, PhD Symposium

Sunday, May 25th, 2014

								1	
	Ourania	Polymnia		Kalia			Efterpi		Orpheas
09:30 - 10:30	Workshop USEW00D 2014 Building a Web Observa- tory for research on LOD usage	Workshop SMILE 2014 Social Media and Linked Data for Emergency Response		Workshop LIME 2014 2nd International Workshop on Linked Media	Workshop KNOW@LOD 2014 Knowledge Discovery and Data Mining Meets Linked Open Data	Tutorial Semantic Data Management in Graph Data Bases 2014	Tutorial  QA over LOD  Question  Answering  over Linked  Data: Challenges, Approaches & Trends	Tutorial Social Web: Where are the Seman- tics?	PhD Symposium
10:30 - 11:00	Coffee break								
11:00 - 13:00	Workshop USEW00D 2014 Building a Web Observa- tory for research on LOD usage	Workshop SMILE 2014 Social Media and Linked Data for Emergency Response		Workshop LIME 2014 2nd International Workshop on Linked Media	Workshop KNOW@LOD 2014 Knowledge Discovery and Data Mining Meets Linked Open Data	Tutorial Semantic Data Management in Graph Data Bases 2014	Tutorial  QA over LOD  Question  Answering  over Linked  Data: Challenges, Approaches & Trends	Tutorial Social Web: Where are the Seman- tics?	PhD Symposium
13:00 - 14:30	Lunch break								
14:30 - 16:00	Workshop USEW00D 2014 Building a Web Observa- tory for research on LOD usage	Workshop SemanticSen- timentAnaly- sis2014	Workshop Sepublica 2014	Workshop LIME 2014 2nd International Workshop on Linked Media	Workshop KNOW@LOD 2014 Knowledge Discovery and Data Mining Meets Linked Open Data	Tutorial Semantic Data Management in Graph Data Bases 2014	<b>Tutorial</b> RDF Stream Processing	Tutorial Social Web: Where are the Seman- tics?	PhD Symposium
16:00 - 16:30	Coffee break								
16:30 - 18:00	Workshop USEWOOD 2014 Building a Web Observa- tory for research on LOD usage	Workshop SemanticSen- timentAnaly- sis2014	<b>Workshop</b> Sepublica 2014	Workshop LIME 2014 2nd International Workshop on Linked Media	Workshop KNOW@LOD 2014 Knowledge Discovery and Data Mining Meets Linked Open Data	Tutorial Semantic Data Management in Graph Data Bases 2014	<b>Tutorial</b> RDF Stream Processing	Tutorial Social Web: Where are the Seman- tics?	PhD Symposium

# Workshops, Tutorials, LinkedUp Challenge

Monday, May 26th, 2014

			1					
	Ourania	Polymnia		Kalia		Thalia		Clio
09:30 - 10:30	Workshop WASABI 2014 Workshop on Semantic Web Enterprise Adoption and Best Practice	Workshop SALAD 2014 Services and Applications over Linked APIs and Data	Workshop HSWI 2014 Human-Semantic Web Interaction	Workshop FEOSW 2014	Tutorial BabelNet 2.0 BabelNet goes to the Multilingual Semantic Web	Tutorial VISLOD 2014: Visual Analytics with Linked Open Data and Social Media for e-Governance	Tutorial Rights and Licenses for Linked Data	LinkedUp Challenge
10:30 - 11:00	Coffee break							
11:00 - 13:00	Workshop WASABI 2014 Workshop on Semantic Web Enterprise Adoption and Best Practice	Workshop SALAD 2014 Services and Applications over Linked APIs and Data	Workshop HSWI 2014 Human-Semantic Web Interaction	Workshop FEOSW 2014	Tutorial BabelNet 2.0 BabelNet goes to the Multilingual Semantic Web	Tutorial VISLOD 2014: Visual Analytics with Linked Open Data and Social Media for e-Governance	<b>Tutorial</b> Rights and Licenses for Linked Data	LinkedUp Challenge
13:00 - 14:30	Lunch break							
14:30 - 16:00	Workshop PROFILES 2014 Dataset PROFI- ling & federated Search for Linked Data	Workshop SALAD 2014 Services and Applications over Linked APIs and Data	Workshop HSWI 2014 Human-Semantic Web Interaction	Workshop WoDOOM 2014 Debugging Ontologies and Ontology Mappings	Tutorial Schema.org & GoodRelations The Web of Data for E-Commerce for Researchers and Practitioners	Tutorial VISLOD 2014: Visual Analytics with Linked Open Data and Social Media for e-Governance	Tutorial Rights and Licenses for Linked Data	Workshop EMPIRICAL 2014
16:00 - 16:30	Coffee break							
16:30 - 18:00	Workshop PROFILES 2014 Dataset PROFI- ling & federated Search for Linked Data	Workshop SALAD 2014 Services and Applications over Linked APIs and Data	Workshop HSWI 2014 Human-Semantic Web Interaction	Workshop WoDOOM 2014 Debugging Ontologies and Ontology Mappings	Tutorial Schema.org & GoodRelations The Web of Data for E-Commerce for Researchers and Practitioners	Tutorial VISLOD 2014: Visual Analytics with Linked Open Data and Social Media for e-Governance	<b>Tutorial</b> Rights and Licenses for Linked Data	Workshop EMPIRICAL 2014

Tuesday, May 27th, 2014 (09:00 -15:45)

	Room Hermes/Apollon TRACK 1	Room Polymnia/Erato/Kalia/Melpo TRACK 2
09:00 -09:30	Opening Ceremony by General Chair and Local Representative	
09:30 -11:00	Keynote Speech Steffen Staab: "Programming the Semantic Web" Session Chair: Fabien Gandon	
10:30 - 10:30	Coffee Break (Conference Center Lobby I & Lobby II)	
11:00 - 12:40	Mobile, Sensor and Semantic Streams Session Chair: Oscar Corcho	In-Use and Industrial I Session Chair: Mathieu d'Aquin
11:00	Shen Gao, Thomas Scharrenbach and Abraham Bernstein. The CLOCK Data-Aware Eviction Approach: Towards Processing Linked Data Streams with Limited Resources	Benedikt Kämpgen, Tobias Weller, Sean O'Riain, Craig Weber and Andreas Harth. Accepting the XBRL Challenge with Linked Data for Financial Data Integration
11:25	Kia Teymourian and Adrian Paschke. Plan-Based Semantic Enrichment of Event Streams	Freddy Lecue, Robert Tucker, Veli Bicer, Pierpaolo Tommasi, Simone Tallevi-Diotallevi and Marco Luca Sbodio. Predicting Severity of Road Traffic Congestion using Semantic Web Technologies
11:50	Luca Costabello. Error-Tolerant RDF Subgraph Matching for Adaptive Presentation of Linked Data on Mobile	Ali Khalili, Sören Auer and Axel-Cyrille Ngonga Ngomo. conTEXT Lightweight Text Analytics using Linked
12:15	Norberto Fernández García, Jesús Arias Fisteus, Luis Sánchez Fernández, Damaris Fuentes-Lorenzo and Óscar Corcho. RDSZ: An approach for lossless RDF stream compression	Alex Stolz, Bene Rodriguez-Castro, Andreas Radinger and Martin Hepp. PCS20WL: A Generic Approach for Deriving Web Ontologies from Product Classification Systems
12:40 - 14:00	Lunch (Main Restaurant)	
14:00 - 14:50	Linked Data I Session Chair : Freddy Lecue	Social Web and Web Science Session Chair: Harald Sack
14:00	Tobias Kuhn and Michel Dumontier. Trusty URIs: Verifiable, Immutable, and Permanent Digital Artifacts for Linked Data	Hassan Saif, Miriam Fernandez, Yulan He and Harith Alani. SentiCircles for Contextual and Conceptual Semantic Sentiment analysis of Twitter
14:25	Saisai Gong, Wei Hu and Yuzhong Qu. Leveraging Distributed Human Computation and Consensus Partition for Entity Coreference	Pavan Kapanipathi, Prateek Jain, Chitra Venkataramani and Amit Sheth. User Interests Identification on Twitter Using a Hierarchical Knowledge Base
14:50 - 15:15	Services, Processes and Cloud Computing Session Chair : Freddy Lecue	Francesco Osborne, Giuseppe Scavo and Enrico Motta. Identifying diachronic topic-based research communities by clustering
14:50	Carlos Pedrinaci, Jorge Cardoso and Torsten Leidig. Linked USDL: a Vocabulary for Web-scale Service Trading	shared research trajectories
15:15 - 15:45	Coffee Break (Conference Center Lobby I & Lobby II)	

Room Hermes/Apollon

Tuesday, May 27th, 2014 (15:45 -21:30)

	TRACK 1		TRACK 2		
15:45 - 17:00	Data Management I Session Chair : Maria-Esther Vidal		Natural Language Processing Session Chair: Harith Alani		
15:45	Andreas Wagner, Veli Bicer and Th Pay-as-you-go Approximate Join To	anh Tran. op-k Processing for the Web of Data	Dimitris Kontokostas, Martin Brümmer, Sebastian Hellmann, Jens Lehmann and Lazaros Ioannidis.  NLP data cleansing based on Linguistic Ontology constraints		
16:10	Andreas Kasten, Ansgar Scherp an A Framework for Iterative Signing o		Mauro Dragoni, Alessio Bosca, Matteo Casu and Chiara Di Francesco- marino. Using Semantic and Domain-based Information in CLIR Systems		
16:35	Thomas Gottron and Christian Gottr Perplexity of Index Models over Evo		Semantic Web Policies, Rights and Governance Session Chair : Pompeu Casanovas		
			Elena Cabrio, Alessio Palmero Aprosio and Serena Villata. These are your rights: A Natural Language Processing Approach to Automated RDF Licenses Generation		
	Room: Orpheas TRACK 3	Room: Thalia/Efterpi TRACK 4	Room: Polymnia/Erato TRACK 5	Beach Bar TRACK 6	
17:00 - 18:30	EU Projects Networking Session Session Chairs: Mari Carmen Suarez de Figueroa Baonza, Sergio Consoli	Al Mashup Challenge Session Chair: Ioannis Papdakis	Semantic Web Evaluation Challenges Session Chair: Milan Stankovic		
17:00	One-minute madness: EU Projects presentations	Scherp, Ansgar: An Approach for Incremental Entity Resolution at the Example of Social Media Data	Angelo Di Iorio, Christoph Lange. Semantic Publishing Challenge: presentation of tasks		
17:30	EU Project networking round tables	Trinh Tuan, Dat: Open Linked Widgets Mashup Platform     Portier, Pierre-Edouard: SEMashup     Making Use of Linked Data for Generating Enhanced Snippets     Dell'Aglio, Daniele: Augmented Participation to Live Events through Social Network Content Enrichment	Ivan Cantador, Tommaso Di Noia. Linked Open Data-enabled Recommender Systems Challenge: presentation of tasks		
18:00		5. Khalili, Ali: conTEXT - A Mashup platform for Lightweight Text Analytics	Erik Cambria, Diego Reforgiato. Concept-Level Sentiment Analysis Challenge: presentation of tasks.		
		<b>LinkedUp Challenge Introduction</b> Session Chair: Stefan Dietze			
19:00 - 21:30				EU Project Posters Semantic Web Evaluation Chal- lenges , Al Mashup Challenge, LinkedUp Challenge	

Wednesday, May 28th, 2014 (09:15 -15:45)

	Room Hermes/Apollon TRACK 1	Room Polymnia/Erato/Kalia/Melpo TRACK 2
9:15 - 9:30	Annoucements	
9:30 - 10:30	Keynote Speech Session Chair: Valentina Presutti Luciano Floridi : "Coordination, Semantics, and Autonomy"	
10:30 - 11:00	Coffee Break (Conference Center Lobby I & Lobby II)	
11:00 - 12:40	Reasoning Session Chair : Sebastian Rudolph	Machine Learning Session Chair: Lise Getoor
11:00	Martin Peters, Christopher Brink, Sabine Sachweh and Albert Zündorf. Scaling Parallel Rule-based Reasoning	Ilaria Tiddi, Mathieu D'Aquin and Enrico Motta.  Dedalo: looking for Clusters Explanations in a Labyrinth of Linked Data
11:25	Arnab Dutta, Christian Meilicke and Simone Ponzetto. A Probabilistic Approach for Integrating Heterogeneous Knowledge Sources	Huakang Li, Yi Liu, Mingyi Guo and Bei Xu. A Knowledge Based Approach for Tackling Mislabeled Multi-class Big Social Data
11:50	Olivier Curé, Guillaume Blin, Dominique Revuz and David Célestin Faye. WaterFowl: a Compact, Self-indexed and Inference-enabled RDF Store	Thomas Gottron, Ansgar Scherp and Stefan Scheglmann. Providing Alternative Declarative Descriptions for Entity Sets using Parallel Concept Lattices
12:15	Giorgos Stoilos. Ontology-Based Data Access Using Rewriting, OWL 2 RL Systems and Repairing	Axel-Cyrille Ngonga Ngomo, Mohamed Sherif and Klaus Lyko. Unsupervised Link Discovery Through Knowledge Base Repair
12:40 - 14:00	Lunch (Main Restaurant)	
14:00 - 15:15	Linked Open Data II Session Chair: Vojtech Svatek	Cognition and Semantic Web Session Chair: Aldo Gangemi
14:00	Basil Ell, Andreas Harth and Elena Simperl. SPARQL Query Verbalization for Explaining Semantic Search Engine Queries	Paul Warren, Paul Mulholland, Trevor Collins and Enrico Motta. The usability of Description Logics: Understanding the cognitive difficulties presented by Description Logics
14:25	Xin Wang, Thanassis Tiropanis and Hugh C. Davis. Optimising Linked Data Queries Using Runtime Statistics in the Presence of Co-reference	Khadija Elbedweihy, Suvodeep Mazumdar, Stuart N. Wrigley and Fabio Ciravegna. NL-Graphs: A Hybrid Approach toward Interactively Querying Semantic Data
14:50	Johann Schaible, Thomas Gottron and Ansgar Scherp. Survey on Common Strategies of Vocabulary Reuse in Linked Open Data Modeling	Paolo Ciancarini, Angelo Di Iorio, Andrea Giovanni Nuzzolese, Silvio Peroni and Fabio Vitali. Evaluating citation functions in CiTO: cognitive issues
15:15 - 15:45	Coffee Break (Conference Center Lobby I & Lobby II)	

Wednesday, May 28th, 2014 (15:45 -20:00)

	Room Hermes/Apollon TRACK 1	Room Polymnia/Erato/Kalia/Melpo TRACK 2
15:50 - 17:00	Data Management II Session Chair: Jacco van Ossenbruggen	In-Use & Industrial II Session Chair: Evelyne Viegas
15:50	Muhammad Saleem and Axel-Cyrille Ngonga Ngomo. HiBISCuS: Hypergraph-Based Source Selection for SPARQL Endpoint Federation	Dan Scott. Seeding Structured Data by Default via Open Source Library Systems
16:15	Christina Lantzaki, Thanos Yannakis, Yannis Tzitzikas and Anastasia Analyti. Generating Synthetic RDF Data with Connected Blank Nodes for Bench- marking	Christoph Pinkel, Carsten Binnig, Peter Haase, Clemens Martin, Kunal Sengupta and Johannes Trame. How to Efficiently Find a Partner? An Evaluation of Editing Approaches to Construct R2RML Mappings
16:35	Roberto De Virgilio and Antonio Maccioni. Distributed Keyword Search over RDF via MapReduce	László Török and Martin Hepp. Towards Portable Shopping Histories: Using GoodRelations to Expose Ownership Information to E-Commerce Sites
17:00 - 18:30	Panel: "Data Protection and Security on the Web" Session Chair: Valentina Presutti Panelists: Harith Alani, Pompeu Casanova, Luciano Floridi, Fabien Gandon, Aldo Gangemi, Steffen Staab, Evelyne Viegas, Maria Esther Vidal	
20:00	Conference Gala Dinner Aldemar Knossos Main Pool	

### Thursday, May 29th, 2013

	Room Hermes/Apollon TRACK 1	Room Polymnia/Erato/Kalia/Melpo TRACK 2	Room Orpheas TRACK 3
09:00 - 11:00		Posters and Demos (Room Ourania/Polymnia/Erato/Kalia/Melpo/Thalia/Efterpi/Clio)	
11:00 - 11:30	Coffee Break (Conference Center Lobby I & Lobby II)		
11:30 - 12:30	Keynote Speech Session Chair: Claudia D'Amato Lise Getoor: "Combining Statistics and Semantics to Turn Data into Knowledge"		
12:30 - 14:00			
14:00 - 15:15	Linked Open Data III Session Chair: Abraham Bernstein	Vocabularies, Schemas, Ontologies Session Chair: Martin Hepp	<b>Best Workshop Papers</b> Session Chair: Harald Sack
14:00	Rakebul Hasan. Generating and Summarizing Explanations for Linked Data	Benjamin Zapilko and Brigitte Mathiak. Benjamin Zapilko and Brigitte Mathiak. Object Property Matching utilizing the Overlap between Imported Ontologies	Please refer to page 72/73
14:25	Anisa Rula, Matteo Palmonari, Axel-Cyrille Ngonga Ngomo, Daniel Gerber, Jens Lehmann and Lorenz Bühmann. Hybrid Acquisition of Temporal Scopes for RDF Data	Yuan Ren, Artemis Parvizi, Chris Mellish, Jeff Z. Pan, Kees Van Deemter and Robert Stevens. Towards Competency Question-driven Ontology Authoring	
14:50	Dominik Wienand and Heiko Paulheim. Detecting Incorrect Numerical Data in DBpedia	Duy Dinh, Julio Cesar Dos Reis, Cedric Pruski, Marcos Da Silveira and Chantal Reynaud. Identifying change patterns of concept attributes in onto- logy evolution	
15:15 - 15:45	Coffee Break (Conference Center Lobby I & Lobby II)		
15:45 - 16:35	Linked Open Data IV Session Chair: Elena Simperl	In-Use & Industrial III Session Chair: Evelyne Viegas	Wrap-up session (Workshops, Tutorials, PhD Symposium)
15:45	Besnik Fetahu, Stefan Dietze, Bernardo Pereira Nunes, Marco Antonio Casanova, Davide Taibi and Wolfgang Nejdl. A Scalable Approach for Efficiently Generating Structured Dataset Topic Profiles	Jörg-Uwe Kietz, Floarea Serban, Simon Fischer and Abraham Bernstein. "Semantics Inside!" But let's not tell the Data Miners: Intelligent Support for Data Mining	Workshops and Tutorials Wrap-up Session Chairs: Harald Sack and Nathalie Aussenac-Gilles
16:10	Danyun Xu, Gong Cheng and Yuzhong Qu. Facilitating Human Intervention in Coreference Resolution with Comparative Entity Summaries	Yannis Tzitzikas, Nikos Minadakis, Yannis Marketakis, Pavlos Fafalios, Carlo Allocca, Michalis Mountantonakis and Ioanna Zidianaki. Matware: Constructing and Exploiting Domain Specific Warehouses by Aggregating Semantic	PhD Symposium Summary Session Chairs: Steffen Staab, Mathieu d'Aquin
16:35	Closing and Award Ceremony		

# Sunday, May 25th

Workshop and Tutorial Day I

### **WORKSHOPS**

### **USEWOOD 2014: BUILDING A WEB OBSERVATORY FOR RESEARCH ON LOD USAGE**

Room Ourania | Sunday 25th | 09:30 - 18:00

Bettina Berendt | K.U. Leuven, BE

Markus Luczak-Roesch | University of Southampton, UK

Laura Hollink | VU Amsterdam, NL

### SMILE 2014:SOCIAL MEDIA AND LINKED DATA FOR EMERGENCY RESPONSE

Room Polymnia | Sunday 25th | 09:30 - 13:00

Vita Lanfranchi | University of Sheffield, UK

Kauppinen Tomi | Aalto University, Fl

Suvodeep Mazumdar | University of Sheffield, UK

Christopher Brewster | Aston University, UK

Eva Blomqvist | Linköping University, SE

Carsten Kessler | Hunter College-CUNY, US

### **LIME 2014: 2ND INTERNATIONAL WORKSHOP ON LINKED MEDIA**

Room Kalia | Sunday 25th | 09:30 - 18:00

Lyndon Nixon | New Media Technology Group, MODUL University, AT

Johan Oomen | R&D Department, Netherlands Institute for Sound and Vision, NL

Erik Mannens | Multimedia Lab, iMinds, BE

Florian Stegmaier | University of Passau, DE

Raphaël Troncy | EURECOM, FR

### **SEMANTICSENTIMENTANALYSIS2014**

Room Polymnia | Sunday 25th | 14:30 - 18:00

Aldo Gangemi | U. Paris Nord France/ISTC-CNR Rome, IT

Harith Alani | KMI-OU Milton Keynes, UK

Malvina Nissim | University of Bologna, IT

Eric Cambria | NUS Singapore, SE

Diego Reforgiato | ISTC-CNR Catania, IT

#### **SEPUBLICA 2014**

Room Erato | Sunday 25th | 14:30 - 18:00

Alexander Garcia Castro | Florida State University, US

Robert Stevens | University of Manchester, UK

Phillip Lord | School of Computing Science, Newcastle University, UK

Christoph Lange | University of Bonn, DE

### KNOW@LOD 2014: KNOWLEDGE DISCOVERY AND DATA MINING MEETS LINKED OPEN DATA

Room Melpo | Sunday 25th | 09:30 - 18:00

Heiko Paulheim | University of Mannheim, DE

Johanna Voelker | University of Mannheim, DE

Harald Sack | Hasso-Plattner Institute, Potsdam, DE

Jens Lehmann | University of Leipzig, DE

Vojtech Svatek | University of Economics, Prague, CZ

### **TUTORIALS**

### **SEMANTIC DATA MANAGEMENT IN GRAPH DATA BASES 2014**

Room Thalia | Sunday 25th | 09:30 - 18:00

Maria-Esther Vidal | Universidad Simón Bolívar, VE

Maribel Acosta | Institute AIFB in the Karlsruhe Institute of Technology (KIT), DE

Edna Ruckhaus | Universidad Simón Bolívar, VE

Cosmin Basca | Universidad Simón Bolívar, VE

### QA OVER LOD - QUESTION ANSWERING OVER LINKED DATA: CHALLENGES, APPROACHES & TRENDS

Room Efterpi | Sunday 25th | 09:30 - 13:00

Christina Unger | Bielefeld University in Germany, DE

André Freitas | National University of Ireland, Galway, IE

### SOCIAL WEB: WHERE ARE THE SEMANTICS?

Room Clio | Sunday 25th | 09:30 - 18:00

Miriam Fernandez | KMI, Open University, Mealton Keynes, UK Andrés Garcia-Silva | OEG, UPM, Madrid, ES Victor Rodriguez-Doncel | OEG, UPM, Madrid, ES Oscar Corcho | OEG, UPM, Madrid, ES

### RDF STREAM PROCESSING

Room Efterpi | Sunday 25th | 14:30 - 18:00

Jean-Paul Calbimonte | École Polytechnique Fédérale de Lausanne, FR

Daniele Dell'Aglio | Dip. di Elettronica, Informatica e Bioingegneria, Politecnico di Milano, IT

Marco Balduini | Dip. di Elettronica, Informatica e Bioingegneria, Politecnico di Milano, IT

### PHD SYMPOSIUM

Room Orpheas | Sunday 25th | 09:30 - 18:00

Chairs:

**Steffen Staab** | Institute for Web Science and Technologies - WeST, Universität Koblenz-Landau, DE **Mathieu d'Aquin** | Knowledge Media Institute, The Open University, UK

#### PHD SYMPOSIUM PAPERS

9:30-10:00

Introduction

#### 10:00-11:00 (late stage submissions - 20mins)

On The Discovery of Relational Patterns in Semantically Similar Annotated Linked Data Guillermo Palma

Predicting SPARQL Query Performance and Explaining Linked Data Rakebul Hasan

# 2014.eswc-conferences.org

Metrics-driven Framework for LOD Quality Assessment Behshid Behkamal

#### 11:00-13:00 (early stage submissions - 25mins

Harvesting and Structuring Social Data in Music Information Retrieval Sergio Oramas

Route planning using Linked Open Data Pieter Colpaert

Automatic Detection and Semantic Formalisation of Business Rules Cheikh Kacfah Emani

Combining Linked Data and Statistical Information Retrieval Ricardo Usbeck

Searching Linked Data and services with a single query Mohamed Lamine Mouhoub

## 14:30-16:00 (early stage submissions - 25mins)

Semantic Information Extraction on Domain Specific Data Sheets Kai Barkschat

Towards a Data Warehouse fed with Web Services John Samuel

Designing an integrated semantic framework for structured opinion summarization Ehsan Asgarian

## 16:30-17:15

Group session:

What are the most common issues/challenges in doing a PhD in the Semantic Web area?

# Monday, May 26th

Workshop and Tutorial Day II

# **WORKSHOPS**

# WASABI 2014: WORKSHOP ON SEMANTIC WEB ENTERPRISE ADOPTION AND BEST PRACTICE

Room Ourania | Monday 26th | 09:30 - 13:00

Marco Neumann | iMinds - Multimedia Lab - Ghent University, BE

Sam Coppens | iMinds - Multimedia Lab - Ghent University, BE

Karl Hammar | iMinds - Multimedia Lab - Ghent University, BE

Magnus Knuth | iMinds – Multimedia Lab – Ghent University, BE

**Dominique Ritze** | iMinds – Multimedia Lab – Ghent University, BE

Miel Vander Sande | iMinds - Multimedia Lab - Ghent University, BE

# SALAD 2014: SERVICES AND APPLICATIONS OVER LINKED APIS AND DATA

Room Polymnia | Monday 26th | 09:30 - 18:00

Maria Maleshkova | Karlsruhe Institute of Technology, DE

 $\textbf{Ruben Verborgh} \mid \text{iMinds} - \text{Multimedia Lab} - \text{Ghent University, BE}$ 

 $\textbf{Steffen Stadtm\"{u}ller} \mid \mathsf{Karlsruhe\ Institute\ of\ Technology,\ DE}$ 

Pedro Szekely | University of Southern California, US

## **HSWI 2014: HUMAN-SEMANTIC WEB INTERACTION**

Room Erato | Monday 26th | 09:30 - 18:00

Heiko Paulheim | University of Mannheim, DE

Martin Voigt | Technische Universität Dresden, DE

Annett Mitschick | Technische Universität Dresden, DE

Roberto García | Universitat de Lleida, ES

# **FEOSW 2014**

Room Kalia | Monday 26th | 09:30 - 13:00

Mateusz Radzimski | ATOS Research & Innovation, ES

Angel Garcia Crespo | University Carlos III of Madrid, ES

Juan Miguel Gomez Berbis | University Carlos III of Madrid, ES

José Luis Sánchez Cervantes | University Carlos III of Madrid, ES

# PROFILES 2014: DATASET PROFILING & FEDERATED SEARCH FOR LINKED DATA

Room Ourania | Monday 26th | 14:30 - 18:00

Elena Demidova | L3S Research Center, DE Stefan Dietze | L3S Research Center, DE Julian Szymanski | Gdansk University of Technology, PL John Breslin | NUI Galway, IE

## **WODOOM 2014: DEBUGGING ONTOLOGIES AND ONTOLOGY MAPPINGS**

Room Kalia | Monday 26th | 14:30 - 18:00

Patrick Lambrix | Linköping University, SE Guilin Qi | Southeast University, CN Matthew Horridge | Stanford University, US Bijan Parsia | University of Manchester, UK

#### **EMPIRICAL 2014**

Room Clio | Monday 26th | 14:30 - 18:00

 $\textbf{Kjetil Kjernsmo} \mid \text{University of Oslo, NO}$ 

Maria Esther Vidal | Universidad Simón Bolívar, VE

Jacco van Ossenbruggen | CWI, VU University Amsterdam, NL

# **TUTORIALS**

## **BABELNET 2.0 BABELNET GOES TO THE MULTILINGUAL SEMANTIC WEB**

Room Melpo | Monday 26th | 09:30 - 13:00

**Roberto Navigli** | Sapienza University in Roma, IT **David Jurgens** | Sapienza University in Roma, IT

# VISLOD 2014 : VISUAL ANALYTICS WITH LINKED OPEN DATA AND SOCIAL MEDIA FOR E-GOVERNANCE

Room Thalia | Monday 26th | 09:30 - 18:00

Vita Lanfranchi | University of Sheffield, UK

 $\textbf{Kauppinen Tomi} \mid \mathsf{Aalto University, FI}$ 

 $\textbf{Suvodeep Mazumdar} \mid \textbf{University of Sheffield, UK}$ 

# **RIGHTS AND LICENSES FOR LINKED DATA**

Room Efterpi | Monday 26th | 09:30 - 18:00

Pompeu Casanovas | Universitat Autonoma de Barcelona, ES Guido Governatori | NICTA Queensland Research Laboratory, AU Victor Rodriguez-Doncel | OEG, UPM, Madrid, ES Antonino Rotolo | Università di Bologna, IT Serena Villata | INRIA Sophia Antipolis, FR

# SCHEMA.ORG & GOODRELATIONS: THE WEB OF DATA FOR E-COMMERCE FOR RESEARCHERS AND PRACTIONERS

Room Melpo | Monday 26th | 14:30 - 18:00

Martin Hepp | Universität der Bundeswehr München, DE Alex Stolz | Universität der Bundeswehr München, DE

# LINKEDUP CHALLENGE

Room Clio | Monday 26th | 09:30 - 13:00

Mathieu d'Aquin | Open University, UK Stefan Dietze | L3S Research Center, DE Hendrik Drachsler | Open Universiteit NL Marieke Guy | Open Knowledge Foundation, UK Eelco Herder | L3S Research Center, DE

## **OPEN TRACK**

AGRIS — exploiting bibliographic records to create rich Linked Open Data page Fabrizio Celli

DBLPXplorer: Interactive Graphical Interfaces for the Computer Science Bibliography Ricardo Kawase | Ujwal Gadiraju | Patrick Siehndel

Konnektid – Social Learning Anytime, Anywhere Michel Visser | Simone Potenza | Romee Houben

LODStories: Learning About Art by Building Multimedia Stories
Jianliang Chen | Yuting Liu | Dipanwita Maulik | Linda Xu | Hao Zhang | Craig A. Knoblock |
Pedro Szekely | Miel Vander Sande

Rhizi.net

Dor Garbash | Eyal Rotbart | William Zeng | Brendan Fong | Erik Edstrom | Jacob Cole | Calvin Fong | Yael Ben Dov

Solvonauts : an open educational search engine Pat Lockley

TuvaLabs – Data Literacy Skills for a Brighter Future Harshil Parikh | Jaimin Patel | Benjamin Farahmand | Rachana Pandey

## FOCUSED TRACK: SIMPLIFICATOR

The electronic Discharge Letter (eDL) mobile app Leonardo Lezcano | Michel Triana | Bridget Maher | Pat Henn | Carola Orrego | Lina Stieger | Hanna Schroeder | Susanne Druener | Sasa Sopka | Marcus Specht

Visualization of Labour Conflicts in the Netherlands for last 700 years Vyacheslav Tykhonov

# Tuesday, May 27th

Main Conference Day

# **OPENING CEREMONY**

Room Hermes/Apollon | Tuesday 27th | 09:00 - 09:30

General Chair Local Representative

# **KEYNOTE SPEECH - STEFFEN STAAB:**"PROGRAMMING THE SEMANTIC WEB"

Room Hermes/Apollon | Tuesday 27th | 09:30 - 10:30

Session Chair: Fabien Gandon

# **MOBILE, SENSOR AND SEMANTIC STREAMS**

Room Hermes/Apollon | Tuesday 27th |11:00 - 12:40

Session Chair: Oscar Corcho

#### 11:00

The CLOCK Data-Aware Eviction Approach: Towards Processing Linked Data Streams with Limited Resources

Shen Gao | Thomas Scharrenbach | Abraham Bernstein

#### 11:25

Plan-Based Semantic Enrichment of Event Streams Kia Teymourian | Adrian Paschke

#### 11.50

Error-Tolerant RDF Subgraph Matching for Adaptive Presentation of Linked Data on Mobile Luca Costabello

#### 12:15

RDSZ: An approach for lossless RDF stream compression" Norberto Fernández García | Jesús Arias Fisteus | Luis Sánchez Fernández | Damaris Fuentes-Lorenzo | Óscar Corcho

# **IN-USE AND INDUSTRIAL I**

Room Polymnia/Erato/Kalia/Melpo | Tuesday 27th | 11:00 - 12:40

Session Chair: Mathieu D'Aquin

#### 11:00

Accepting the XBRL Challenge with Linked Data for Financial Data Integration 
Benedikt Kämpgen | Tobias Weller | Sean O'Riain | Craig Weber | Andreas Harth

#### 11.25

Predicting Severity of Road Traffic Congestion using Semantic Web Technologies Freddy Lecue | Robert Tucker | Veli Bicer | Pierpaolo Tommasi | Simone Tallevi-Diotallevi | Marco Luca Sbodio

#### 11:50

conTEXT -- Lightweight Text Analytics using Linked Ali Khalili | Sören Auer | Axel-Cyrille Ngonga Ngomo

#### 12:15

PCS20WL: A Generic Approach for Deriving Web Ontologies from Product Classification Systems Alex Stolz | Bene Rodriguez-Castro | Andreas Radinger | Martin Hepp

# LINKED OPEN DATA I

Room Hermes/Apollon | Tuesday 27th | 14:00 - 14:50

**Session Chair: Freddy Lecue** 

#### 14:00

Trusty URIs: Verifiable, Immutable, and Permanent Digital Artifacts for Linked Data **\*** Tobias Kuhn | Michel Dumontier

#### 14.2

Leveraging Distributed Human Computation and Consensus Partition for Entity Coreference Saisai Gong  $\mid$  Wei Hu  $\mid$  Yuzhong Qu

# **SOCIAL WEB AND WEB SCIENCE**

Room Polymnia/Erato/Kalia/Melpo | Tuesday 27th | 14:00 - 15:15

Session Chair: Harald Sack

#### 14:00

SentiCircles for Contextual and Conceptual Semantic Sentiment analysis of Twitter Hassan Saif | Miriam Fernandez | Yulan He | Harith Alani

#### 14:25

User Interests Identification on Twitter Using a Hierarchical Knowledge Base Pavan Kapanipathi | Prateek Jain | Chitra Venkataramani | Amit Sheth

#### 14:50

Identifying diachronic topic-based research communities by clustering shared research trajectories **\*\*** Francesco Osborne | Giuseppe Scavo | Enrico Motta

# SERVICES, PROCESSES AND CLOUD COMPUTING

Room Hermes/Apollon | Tuesday 27th | 14:50 - 15:15

**Session Chair: Freddy Lecue** 

#### 14:50

Linked USDL: a Vocabulary for Web-scale Service Trading Carlos Pedrinaci | Jorge Cardoso | Torsten Leidig

# **DATA MANAGEMENT I**

Room Hermes/Apollon | Tuesday 27th | 15:45 - 17:00

Session Chair: Maria-Esther Vidal

#### 15:45

Pay-as-you-go Approximate Join Top-k Processing for the Web of Data Andreas Wagner  $\mid$  Veli Bicer  $\mid$  Thanh Tran

#### 16:10

A Framework for Iterative Signing of Graph Data on the Web Andreas Kasten | Ansgar Scherp | Peter Schauß

#### 16:35

Perplexity of Index Models over Evolving Linked Data Thomas Gottron | Christian Gottron

# **NATURAL LANGUAGE PROCESSING**

Room Polymnia/Erato/Kalia/Melpo | Tuesday 27th | 15:45 - 17:00

Session Chair: Harith Alani

#### 15.45

NLP data cleansing based on Linguistic Ontology constraints **№**Dimitris Kontokostas | Martin Brümmer | Sebastian Hellmann | Jens Lehmann | Lazaros Ioannidis

#### 16:10

Using Semantic and Domain-based Information in CLIR Systems
Mauro Dragoni | Alessio Bosca | Matteo Casu | Chiara Di Francescomarino

# **SEMANTIC WEB POLICIES, RIGHTS AND GOVERNANCE**

Room Polymnia/Erato/Kalia/Melpo | Tuesday 27th | 16:35 - 17:00

**Session Chair: Pompeu Casanovas** 

#### 16:35

These are your rights: A Natural Language Processing Approach to Automated RDF Licenses Generation

Elena Cabrio | Alessio Palmero Aprosio | Serena Villata

# **EU PROJECT NETWORKING SESSION**

Room Orpheas | Tuesday 27th | 17:00 - 18:30

Session Chairs: Mari Carmen Suarez de Figueroa Baonza | Sergio Consoli

17:00 - 17:30

One-minute madness: EU Project presentations

17:30- 18:30

EU networking round tables

CityPulse: Real-Time IoT Stream Processing and Large-scale Data Analytics for Smart City Applications Payam Barnaghi | Ralf Tönjes | Jan Holler | Manfred Hauswirth | Amit Sheth | Pramod Anantharam

The GeoKnow Project
Jens Lehmann | Axel-Cyrille Ngonga Ngomo

LinkedTV: Web and TV seamlessly interlinked using semantic technology Lyndon Nixon | Raphaël Troncy.

PERICLES EU Integrated Project: Research Strategy and First Results

Efstratios Kontopoulos | Fabio Corubolo | Anna Grit Eggers | Jens Ludwig | Mark Hedges | Simon

Waddington | Jean-Pierre Chanod | Jean-Yves Vion-Dury | Nikolaos Lagos | Adil Hasan | Sándor

Darányi | Ioannis Kompatsiaris

PlanetData: A European Network of Excellence on Large-Scale Data Management Irini Fundulaki

BioASQ: A challenge on large-scale biomedical semantic indexing and question answering Georgios Paliouras | Yannis Almirantis | Michael Alvers | Ion Androutsopoulos | Thierry Artieres | Georgios Balikas | Liliana Barrio-Alvers | Nicolas Baskiotis | Norman Heino | Patrick Gallinari | Eric Gaussier | Anastasia Krithara | Prodromos Malakasiotis | Axel-Cyrille Ngonga Ngomo | Ioannis Partalas | John Pavlopoulos | Dimitris Polychronopoulos | Michael Schroeder | George Tsatsaronis | Dirk Weissenborn | Matthias Zschunke.

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SemaGrow: Data Intensive Techniques to Boost the Real-Time Performance of Global Agricultural Data Infrastructures
Angelos Charalambidis | Stasinos Konstantopoulos

COINVENT: Concept Invention Theory - Ontologies and Semantic Web Technologies for Concept Invention

Marco Schorlemmer | Alan Smaill | Kai-Uwe Kuehnberger | Oliver Kutz | Simon Colton |

Emilios Cambouropoulos | Alison Pease.

COMSODE: Component Supporting the Open Andrea Maurino

EUCLID: EdUcational Curriculum for the usage of Linked Data Elena Simperi

SIFEM: Using semantic technologies to support Finite Element biosimulations Andre Freitas  $\mid$  Ratnesh Sahay

The Linked Data Benchmark Council (LDBC)
Ioan Toma | Irini Fundulak | Vladimir Alexiev

EPPICS: Event Prediction and Decision Support based on Huge Data from Physical-Social Systems Lars Schmidt-Thieme | Achim Rettinger

Linked Open Earth Observation Data: The LEO Project Manolis Koubarakis | Ioannis Vlachopoulos

MULTISENSOR: Mining and Understanding of multilinguaL content for Intelligent
Sentiment Enriched coNtext and Social Oriented inteRpretation
Stefanos Vrochidis | Ioannis Kompatsiaris | Vladimir Alexiev | Gerard Casamayor | Enric Staromiejski | Ioannis Arapakis | Reinhard Busch | Michael Jugov | Nicolaus Heise | Teresa Forrellat |
Anastasia Moumtzidou | Maurice Grinberg | Leo Wanner, Alan Mas Soro | Iris Miliarak | Vera Aleksi | Mirja Eckhoff | Tilman Wagner | Sara Pedraz

SEMANCO Semantic Tools for Carbon Reduction in Urban Planning Leandro Madrazo | Alvaro Sicilia | German Nemirovski.

READY4SmartCities: ICT Roadmap and Data Interoperability for Energy Systems in Smart Cities Raúl García-Castro | Asunción Gómez-Pérez.

Managing Risks and Opportunities in Online Business Communities: The ROBUST Project Thomas Gottron | Steffen Staab

PRELIDA - Preserving Linked Data Grigoris Antoniou | Sotiris Batsakis

AnnoMarket – Multilingual Text Analytics at Scale on the Cloud Marin Dimitrov | Helen Lippell | Ian Roberts | Petar Kostov | Hamish Cunningham | Philippe Rigaux

DaPaaS – A Data- and Platform-as-a-Service Approach to Efficient Open Data Publication and Consumption Marin Dimitrov | Dumitru Roman | Bill Roberts | Tony Lee | Tom Heath | Momchill Zarev.

xLiMe: Cross-lingual Cross-media Knowledge Extraction Achim Rettinger

XLike: Cross-lingual Knowledge Extraction Marko Grobelnik | Achim Rettinger

Khresmoi: semantics in medical search Henning Müller | Allan Hanbury | Angus Roberts | Konstantin Pentchev | Vassil Momtchev

Fusepool (SME) for Information Pooling for Product/Service Development and Research Michael Kaschesky

LIDER: Linked Data as an enabler of cross-media and multilingual content analytics for enterprises across Europe
Philipp Cimiano

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BYTE - Big data roadmap and cross disciplinarY community for addressing socieTal Externalities

José María García | Kush Wadhwa | Hans Lammerant | Lorenzo Bigagli | Arild Waaler | Edward

Curry | Peter Stefan | Scott Cunningham | Stéphane Grumbach | Grunde Løvoll | Sebnem Rusitschka

ReThinkBig Collaborative Support Action
Gaelle Lortal | Christophe Gouguenheim | David Faure | Claire Laudy | Rethinkbig Consortium Dissemination Lead

# AI MASHUP CHALLENGE

Room Thalia/Efterpi | Tuesday 27th | 18:00 - 18:30

**Session Chair: Ioannis Papdakis** 

- 01. An Approach for Incremental Entity Resolution at the Example of Social Media Data Ansgar Scherp
- 02. Open Linked Widgets Mashup Platform Dat Trinh Tuan
- 03. SEMashup Making Use of Linked Data for Generating Enhanced Snippets
  Pierre-Edouard Portier
- 04. Augmented Participation to Live Events through Social Network Content Enrichment Daniele Dell'Aglio
- conTEXT A Mashup platform for Lightweight Text Analytics Ali Khalili

# LINKEDUP CHALLENGE

Room: Thalia/Efterpi Tuesday 27th 18:00 - 18:30

Session Chair: Stefan Dietze

LinkedUp Challenge Introduction - Minute Madness Presentation by LinkedUp competing paricipants.

# **SEMANTIC WEB EVALUATION CHALLENGES (SEMWEBEVAL 2014)**

Room: Polymnia/Erato | Tuesday 27th | 17:00 - 18:30

Session Chair: Milan Stankovic

This year, for the first time, ESWC will include the SemWebEval Track: Three challenges, which feature state of the art and groundbreaking contributions - applications that deal with some of the most interesting challenges that the Semantic Web community is facing. A total amount of 2100 euros will be distributed among the best systems as challenges prizes. The evaluation datasets, task descriptions, and best systems presented in the context of SemWebEval will be the focus of a Semantic Web Journal special issue dedicated to ESWC 2014. In this session the Challenges Chairs will briefly describe the challenge tasks, the evaluation process and material. The competing contributions will be presented as posters and demos immediately after this session at the Beach Bar.

#### 17:00

Semantic Publishing Challenge: presentation of tasks Angelo Di Iorio | Christoph Lange

#### 17:30

Linked Open Data-enabled Recommender Systems Challenge: presentation of tasks Ivan Cantador | Tommaso Di Noia

#### 18:00

Concept-Level Sentiment Analysis Challenge: presentation of tasks Erik Cambria | Diego Reforgiato

## SEMANTIC PUBLISHING CHALLENGE

ROHub – A digital library of Research Objects supporting scientists towards reproducible science Raul Palma | Oscar Corcho | José Manuel Gómez-Pérez | Cezary Mazurek

Unstable markup: A template-based information extraction from web sites with unstable markup Maxim Kolchin | Fedor Kozlov

Linkitup: Semantic Publishing of Research Data Rinke Hoekstra | Paul Groth | Marat Charlaganov

Understanding Research Dynamics Francesco Osborne | Enrico Motta

Semantify CEUR-WS Proceedings: towards the automatic generation of highly descriptive scholarly publishing Linked Datasets

Francesco Ronzano | Gerard Casamayor Del Bosque | Horacio Saggion

Extraction of workshop proceedings in HTML using the RML mapping language

Anastasia Dimou | Miel Vander Sande | Pieter Colpaert | Laurens De Vocht | Ruben Verborgh | Erik

Mannens | Rik Van de Walle

Faceted Semantic Search for Scientific Publications Iana Atanassova | Marc Bertin

Hybrid Approach for the Semantic Processing of Scientific Papers Marc Bertin | Iana Atanassova

# LINKED OPEN DATA-ENABLED RECOMMENDER SYSTEMS CHALLENGE

Hybrid Recommending Exploiting Multiple DBPedia Language Editions Ladislav Peska | Peter Vojtas

A Hybrid Multi-Strategy Recommender System Using Linked Open Data Petar Ristoski | Eneldo Loza Mencía | Heiko Paulheim

Exploring Semantic Features for Producing Top-N Recommendation Lists from Binary User Feedback Nicholas Ampazis | Theodoros Emmanouilidis

Aggregation Strategies for Linked Open Data-enabled Recommender Systems
Pierpaolo Basile | Cataldo Musto | Marco De Gemmis | Pasquale Lops | Fedelucio Narducci |
Giovanni Semeraro

SemStim at the LOD-RecSys 2014 challenge Benjamin Heitmann | Conor Hayes

LODify: A Hybrid Recommender System based on Linked Open Data Rouzbeh Meymandpour | Joseph Davis Popular Books and Linked Data: Some Results for the ESWC'14 RecSys Challenge Michael Schuhmacher | Christian Meilicke

Semantic Pattern-based Recommender Valentina Maccatrozzo | Davide Ceolin | Lora Aroyo | Paul Groth

Increasing Top-20 diversity through recommendation post-processing Matevz Kunaver | Tomaz Pozrl | Stefan Dobravec | Andrej Kosir

Hybrid model rating prediction with Linked Open Data for Recommender Systems

Andrés Moreno | Christian Ariza-Porras | Paula Lago | Claudia Lucía Jiménez-Guarín | Harold Castro |

Michel Riveill

Deep Learning of Semantic Word Representations to Implement a Content-based Recommender for the RecSys Challenge'14
Omar U. Florez

#### CONCEPT-LEVEL SENTIMENT ANALYSIS CHALLENGE

A Fuzzy System For Semantic Sentiment Analysis Mauro Dragoni | Andrea Tettamanzi | Celia Da Costa Pereira

Lechuzo: Weakly-Supervised System for Fine-Grained Sentiment Analysis Nir Ofek | Lior Rokach

Semantic Lexicon Induction for Concept-level Sentiment Analysis
Pablo Mendes | Anni Coden | Daniel Gruhl | Neal Lewis | Meena Nagarajan | Cartic Ramakrishnan |
Michael Tannenblatt | Steve Welch

Sentic Demo: A Hybrid Concept Level Aspect Based Sentiment Analysis Toolkit Soujanya Poria | Alexander Gelbukh

Sinica Semantic Parser for ESWC'14 Concept-Levle Semantic Analysis Challenge Shafqat Mumtaz Virk | Yann-Huei Lee | Lun-Wei Ku

Improve Polarity Detection of Online Reviews with Bag-of-Sentimental-Concepts Jay Kuan-Chieh Chung | Chi-En Wu | Richard Tzong-Han Tsai

# EU PROJECT POSTERS SEMANTIC WEB EVALUATION CHALLENGES , AI MASHUP CHALLENGE, LINKEDUP CHALLENGE

Beach Bar | Tuesday 27th | 19:00 - 21:30

Dinner in form of a buffet as well as drinks will be provided during the session at the Beach Bar.

# Wednesday, May 28th

Main Conference Day II

# **ANNOUCEMENTS**

Room Hermes/Apollon | Wednesday 28th | 09:15 - 09:30

# **KEYNOTE SPEECH**

Room Hermes/Apollon | Wednesday 28th | 09:30 - 10:30

**Session Chair: Valentina Presutti** 

Luciano Floridi | "Coordination, Semantics, and Autonomy"

# **REASONING**

Room Hermes/Apollon | Wednesday 28th | 11:00 - 12:40

Session Chair: Sebastian Rudolph

#### 11:00

#### 11.25

A Probabilistic Approach for Integrating Heterogeneous Knowledge Sources Arnab Dutta | Christian Meilicke | Simone Ponzetto.

#### 11:50

WaterFowl: a Compact, Self-indexed and Inference-enabled RDF Store Olivier Curé | Guillaume Blin | Dominique Revuz | David Célestin Faye

#### 12:15

Ontology-Based Data Access Using Rewriting, OWL 2 RL Systems and Repairing Giorgos Stoilos

# **MACHINE LEARNING**

Room Polymnia/Erato/Kalia/Melpo | Wednesday 28th | 11:00 - 12:40

Session Chair: Lise Getoor

#### 11:00

Dedalo: looking for Clusters Explanations in a Labyrinth of Linked Data 💆 Ilaria Tiddi | Mathieu D'Aquin | Enrico Motta

#### 11:25

A Knowledge Based Approach for Tackling Mislabeled Multi-class Big Social Data Huakang Li | Yi Liu, Mingyi Guo | Bei Xu

#### 11.50

Thomas Gottron, Ansgar Scherp and Stefan Scheglmann.

Providing Alternative Declarative Descriptions for Entity Sets using Parallel Concept Lattices 
Thomas Gottron | Ansgar Scherp | Stefan Scheglmann

#### 12:15

Unsupervised Link Discovery Through Knowledge Base Repair 

Axel-Cyrille Ngonga Ngomo | Mohamed Sherif | Klaus Lyko

# **LINKED OPEN DATA II**

Room Hermes/Apollon | Wednesday 28th | 14:00 - 15:20

**Session Chair: Vojtech Svatek** 

#### 14:00

SPARQL Query Verbalization for Explaining Semantic Search Engine Queries Basil Ell | Andreas Harth | Elena Simperl

#### 14:25

Optimising Linked Data Queries Using Runtime Statistics in the Presence of Co-reference Xin Wang | Thanassis Tiropanis | Hugh C. Davis.

#### 14:50

Survey on Common Strategies of Vocabulary Reuse in Linked Open Data Modeling Johann Schaible | Thomas Gottron | Ansgar Scherp

# **COGNITION AND SEMANTIC WEB**

Room Polymnia/Erato/Kalia/Melpo | Wednesday 28th | 14:00 - 15:20

Session Chair: Aldo Gangemi

#### 1/1-00

#### 14:25

NL-Graphs: A Hybrid Approach toward Interactively Querying Semantic Data Real Khadija Elbedweihy | Suvodeep Mazumdar | Stuart N. Wrigley | Fabio Ciravegna

#### 14:50

Evaluating citation functions in CiTO: cognitive issues **∑**Paolo Ciancarini | Angelo Di Iorio | Andrea Giovanni Nuzzolese | Silvio Peroni | Fabio Vitali

# **DATA MANAGEMENT II**

Room Hermes/Apollon | Wednesday 28th | 15:50 - 17:00

Session Chair: Jacco van Ossenbruggen

#### 15:50

HiBISCuS: Hypergraph-Based Source Selection for SPARQL Endpoint Federation Muhammad Saleem | Axel-Cyrille Ngonga Ngomo

#### 16:15

Generating Synthetic RDF Data with Connected Blank Nodes for Benchmarking Christina Lantzaki | Thanos Yannakis | Yannis Tzitzikas | Anastasia Analyti

#### 16:35

Distributed Keyword Search over RDF via MapReduce Roberto De Virgilio | Antonio Maccioni

# **IN-USE & INDUSTRIAL II**

Room Polymnia/Erato/Kalia/Melpo | Wednesday 28th | 15:50 - 17:00

**Session Chair: Evelyne Viegas** 

#### 15:50

Seeding Structured Data by Default via Open Source Library Systems Dan Scott

#### 16:15

How to Efficiently Find a Partner? An Evaluation of Editing Approaches to Construct R2RML Mappings Christoph Pinkel | Carsten Binnig | Peter Haase | Clemens Martin | Kunal Sengupta | Johannes Trame

#### 16:35

Towards Portable Shopping Histories: Using GoodRelations to Expose Ownership Information to E-Commerce Sites László Török | Martin Hepp

# PANEL: "DATA PROTECTION AND SECURITY ON THE WEB"

Room Hermes/Apollon | Wednesday 28th | 17:00 - 18:30

Session Chair: Valentina Presutti, STLab ISTC-CNR, IT

Panelists: Harith Alani (KIM Open University, UK) | Pompeu Casanova (Universitat Autònoma de Barcelona, ES) | Luciano Floridi (University of Oxford, UK) | Fabien Gandon (Inria, FR) | Aldo Gangemi (Université Paris 13- CNRS, FR / ISTC-CNR Rome, IT) | Steffen Staab (Universität Koblenz-Landau, DE | Maria Esther Vidal (Universidad Simón Bolívar, VE) | Evelyne Viegas (Microsoft Research, US)

On March 12th, in occasion of the 25th birthday of the World Wide Web, Sir Tim Berners-Lee made an open call for a "Magna Carta" to protect Web users. He said: "It's time for us to make a big communal decision. In front of us are two roads — which way are we going to go? Are we going to continue on the road and just allow the governments to do more and more and more control — more and more surveillance? Or are we going to set up a bunch of values? Are we going to set up something like a Magna Carta for the World Wide Web and say, actually, now it's so important, so much part of our lives, that it becomes on a level with human rights?"

We all know that guaranteeing privacy and security at the same time in a world without the WWW is a challenge, and that each country addresses it in a different way by means of local regulations as well as international agreements. Identifying the right tradeoff on the Web is probably even more complicated, as we deal with a virtual world, where geographical borders loose their importance and role.

The aim of this panel is to identify and discuss the most important issues that should be addressed in order to guarantee web users privacy, on one hand, without putting their security in danger, and web users security, on the other hand, without limiting their freedom by invading their private lives. Can semantics play any role in this trade-off?

We ask our panelists to summarize in three main statements their view on, and possibly their solution to, this problem, hence giving their advice to the definition of a Web users "Magna Carta". This vision is also supported by the "Web We Want" initiative launched by the Web Foundation for gathering people from around the world and collaboratively draft such bill of rights.

# **ESWC 2014 CONFERENCE GALA DINNER**

# Aldemar Knossos Main Pool | Wednesday, May 28th | 20:00

# **YOUR EVENING**

19:30

**WELCOMING GUESTS WITH AN APERITIVE AND LIVE MUSIC** 

20:30

**GALA DINNER** 

22:00 - 23:00

**LIVE MUSIC** 

23:00 - 02:00

**DANCING WITH DJ** 

# Thursday, May 29th Main Conference Day III

# **DEMOS AND POSTERS**

Room Ourania/Polymnia/Erato/Kalia/Melpo/Thalia/Efterpi/Clio | Wednesday 28th | 09:00 - 11:00

#### **DEMOS**

- 01 AnnoMarket Multilingual Text Analytics at Scale on the Cloud

  Marin Dimitrov | Helen Lippell | Ian Roberts | Alex Simov | Hamish Cunningham | Philippe Rigaux
- 02 A Demonstration of a Natural Language Query Interface to an Event-Based Semantic Web Triplestore Richard Frost | Jonathan Donais | Eric Matthews | Wale Agboola | Robert Stewart
- 03 A Rule-Based System for Monitoring of Microblogging Disease Reports Wojciech Lukasiewicz | Kia Teymourian | Adrian Paschke
- 04 Securing Access to Sensitive RDF Data
  Vassilis Papakonstantinou | Giorgos Flouris | Irini Fundulaki | Haridimos Kondylakis
- 05 Publication of RDF streams with Ztreamy

  Jesus Arias Fisteus | Norberto Fernandez Garcia | Luis Sanchez Fernandez | Damaris Fuentes-Lorenzo
- 06 SparqlFilterFlow: SPARQL Query Composition for Everyone Florian Haag | Steffen Lohmann | Thomas Ertl
- 07 The ProtegeVOWL Plugin: Ontology Visualization for Everyone Steffen Lohmann | Stefan Negru | David Bold
- 08 Visualizing RDF Data Cubes using the Linked Data Visualization Model Jiri Helmich | Jakub Klimek | Martin Necasky
- 09 SmarT INsiGhts (STING) An Intelligence Application for Querying Heterogeneous Databases Vikash Kumar | Ganesh Selvaraj | Andy Shin | Paulo Gottgtroy

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- 10 Durchblick A Conference Assistance System for Augmented Reality Devices Anas Alzoghbi | Peter Fischer | Anna Gossen | Peter Haase | Beibei Hu | Georg Lausen | Christoph Pinkel
- 11 FAGI-tr: A tool for aligning geospatial RDF vocabularies Giorgos Giannopoulos | Thomas Maroulis | Dimitrios Skoutas | Nikos Karagiannakis | Spiros Athanasiou
- 12 Painless URI dereferencing using The DataTank Pieter Colpaert | Ruben Verborgh | Erik Mannens
- 13 Aether Generating and Viewing Extended VoID Statistical Descriptions of RDF Datasets Eetu Makela
- 14 Combining a REST Lexical Analysis Web Service with SPARQL for Mashup Semantic Annotation from Text Eetu Makela
- 14 Geographic Summaries from Crowdsourced Data Giuseppe Rizzo | Giacomo Falcone | Rosa Meo | Ruggero Pensa | Raphael Troncy | Vuk Milicic
- 15 CORNER: A Completeness Reasoner for the Semantic Web Fariz Darari | Radityo Eko Prasojo | Werner Nutt
- 16 SPARQL SAHA, a Configurable Linked Data Editor and Browser as a Service Eetu Makela | Eero Hyvonen
- 17 Towards a Semantic Web Platform for Finite Element Simulations Andre Freitas | Kartik Asooja | Swapnil Soni | Marggie Jones | Panagiotis Hasapis | Ratnesh Sahay

- 18 dime: A Context-Aware Information System Simon Scerri | Ismael Rivera | Jeremy Debattista | Simon Thiel | Keith Cortis | Judie Attard | Christian Knecht | Andreas Schuller | Fabian Hermann
- 19 Boosting QAKiS with multimedia answer visualization Elena Cabrio | Vivek Sachidananda | Raphael Troncy
- 20 Dendro: collaborative research data management built on linked open data Joao Rocha Da Silva | Joao Castro | Cristina Ribeiro | Joao Correia Lopes
- 21 TRTML A Tripleset Recommendation Tool based on Supervised Learning Algorithm
  Alexander Arturo Mera Caraballo | Narciso Moura Arruda Junior | Bernardo Pereira Nunes |
  Giseli Rabello Lopes | Marco Antonio Casanova
- 22 LinkLion: A Link Repository for the Web of Data
  Markus Nentwig | Tommaso Soru | Axel-Cyrille Ngonga Ngomo | Erhard Rahm
- 23 Distant Supervision for Relation Extraction using Ontology Class Hierarchy-Based Features Pedro H. R. Assis | Marco A. Casanova
- 24 IDE Integrated RDF Exploration | Access and RDF-based Code Typing with LITEQ Stefan Scheglmann | Martin Leinberger | Steffen Staab | Ralf Laemmel | Matthias Thimm | Evelyne Viegas
- 25 Kuphi An Investigation Tool for Searching for and via Semantic Relations Michael Farber | Lei Zhang | Achim Rettinger
- 26 Making use of Linked Data for Generating Enhanced Snippets Mazen Alsarem | Pierre-Edouard Portier | Sylvie Calabretto
- 27 LinkZoo: A linked data platform for collaborative management of heterogeneous resources Marios Meimaris | Giorgos Alexiou | George Papastefanatos

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- 28 Augmenting TV Newscasts via Entity Expansion

  Jose Luis Redondo-Garc¡a | Michiel Hildebrand | Lilia Perez Romero | Raphael Troncy
- 29 Analyzing Linked Data Quality with LiQuate
  Edna Ruckaus | Maria-Esther Vidal | Simon Castillo | Oscar Burguillos | Oriana Baldizan
- 30 Big, Linked and Open Data: Applications in the German Aerospace Center
  Kallirroi Dogani | Charalampos Nikolaou | Konstantina Bereta | Kostis Kyzirakos |
  Manolis Koubarakis | Stella Giannakopoulou | Panayiotis Smeros | George Garbis |
  Daniela Espinoza Molina | Octavian Corneliu Dimitru | Gottfried Schwarz and Mihai Datchu
- 31 morph-LDP: An R2RML-based Linked Data Platform implementation
  Nandana Mihindukulasooriya | Freddy Priyatna | Oscar Corcho | Raul Garcia Castro |
  Miguel Esteban Gutierrez
- 32 Prod-Trees: Semantic Search for Earth Observation Products
  Kallirroi Dogani | Maria Karpathiotaki | Manolis Koubarakis | Bernard Valentin |
  Paolo Mazzetti | Mattia Santoro | Sabina Di Franco
- 33 ODCleanStore: An ETL Framework for Sustainable RDF Data Processing Tomas Knap | Maria Kukhar | Bohuslav Machac | Petr Skoda | Jiri Tomes | Jan Vojt
- 34 Using semantic technologies for scalable multi-channel communication Ioan Toma | Christoph Fuchs | Corneliu Stanciu | Dieter Fensel
- 35 SCS Connector Quantifying and Visualising Semantic Paths between Entity Pairs Bernardo Pereira Nunes | Jose Eduardo Talavera Herrera | Davide Taibi | Giseli Rabello Lopes | Marco Antonio Casanova | Stefan Dietze
- 36 Browsing DBpedia Entities with Summaries Andreas Thalhammer | Achim Rettinger

- 37 Graphium Chrysalis: Exploiting Graph Database Engines to Analyze RDF Graphs Alejandro Flores | Maria Esther-Vidal | Guillermo Palma
- 38 Collaborative Semantic Management and Automated Analysis of Scientific Literature Bahar Sateli | Rene Witte
- 39 SemLAV: Querying Deep Web and Linked Open Data with SPARQL
  Pauline Folz | Gabriela Montoya | Hala Skaf-Molli | Pascal Molli | Maria Esther Vidal
- 40 Olap4LD A Framework for Building Analysis Applications over Governmental Statistics Benedikt Kampgen | Andreas Harth
- 41 VideoLecturesMashup: using media fragments and semantic annotations to enable topic-centred e-learning
  Lyndon Nixon | Tanja Zdolsek | Ana Fabjan | Peter Kese
- 42 Modelling OWL ontologies with Graffoo Riccardo Falco | Aldo Gangemi | Silvio Peroni | David Shotton | Fabio Vitali

#### **POSTERS**

- 01 Ranking Entities in a Large Semantic Network Michael Schuhmacher | Simone Paolo Ponzetto
- 02 A Semantic Web Based Core Engine to Efficiently Perform Sentiment Analysis
  Diego Reforgiato | Sergio Consoli | Aldo Gangemi | Andrea Nuzzolese | Daria Spampinato
- 03 Linked Data Finland: A 7-star Model and Platform for Publishing and Re-using Linked Datasets Eero Hyvonen | Jouni Tuominen | Miika Alonen | Eetu Makela

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- 04 A Semantic Approach to Support Cross Border e-Justice Enrico Francesconi | Ginevra Peruginelli | Ernst Steigenga | Daniela Tiscornia
- 05 Predicting SPARQL Query Performance Rakebul Hasan | Fabien Gandon
- 06 Balloon Synopsis: A Modern Node-Centric RDF Viewer and Browser for the Web Kai Schlegel | Thomas Weigerber | Florian Stegmaier | Christin Seifert | Michael Granitzer | Harald Kosch
- 07 Annotating Ontologies with Descriptions of Vagueness
  Panos Alexopoulos | Silvio Peroni | Boris Villazon-Terrazas | Jeff Z. Pan
- 08 Rapid Deployment of a RESTful Service for Data Collected by Oceanographic Research Cruises Linyun Fu | Robert Arko
- 09 SPARQL-MM Extending SPARQL to Media Fragments
  Thomas Kurz | Sebastian Schaffert | Florian Stegmaier | Kai Schlegel | Harald Kosch
- 10 RuQAR : Reasoning Framework for OWL 2 RL Ontologies Jaroslaw Bak | Maciej Nowak | Czeslaw Jedrzejek
- 11 The Normalized Freebase Distance Frederic Godin | Tom De Nies | Christian Beecks | Laurens De Vocht | Wesley De Neve | Erik Mannens | Thomas Seidl | Rik Van de Walle
- 12 An Investigation of HTTP Header Information for Detecting Changes of Linked Open Data Sources Renata Dividino | Andre Kramer | Thomas Gottron
- 13 rdf:SynopsViz A Framework for Hierarchical Linked Data Visual Exploration and Analysis Nikos Bikakis | Melina Skourla | George Papastefanatos

- 14 TMR: A Semantic Recommender System using Topic Maps on the Items' Descriptions Angel Luis Garrido | Sergio Ilarri
- 15 Data Cleansing Consolidation with PatchR Magnus Knuth | Harald Sack
- 16 What are the Important Properties of an Entity? Comparing Users and Knowledge Graph Point of View Ahmad Assaf | Ghislain Atemezing | Raphael Troncy | Elena Cabrio
- 17 LiFR: A Lightweight Fuzzy DL Reasoner
  Dorothea Tsatsou | Stamatia Dasiopoulou | Ioannis Kompatsiaris | Vasileios Mezaris
- 18 LUMO: The LinkedTV User Model Ontology Dorothea Tsatsou | Vasileios Mezaris
- 19 Improving the online visibility of touristic service providers by using semantic annotations Ioan Toma | Corneliu Valentin Stanciu | Anna Fensel | Ioannis Stavrakantonakis | Dieter Fensel
- 20 A companion screen application for TV broadcasts annotated with Linked Open Data Lyndon Nixon | Lotte Baltussen | Lilia Perez Romero | Lynda Hardman

# **KEYNOTE SPEECH**

Room Hermes/Apollon | Thursday 29th | 11:30 - 12:30

Session Chair: Claudia D'Amato

Lise Getoor: "Combining Statistics and Semantics to Turn Data into Knowledge"

# LINKED OPEN DATA III

Room Hermes/Apollon | Thursday 29th | 14:00 - 15:15

Session Chair: Abraham Bernstein

#### 14:00

Generating and Summarizing Explanations for Linked Data 💆 Rakebul Hasan

#### 14:25

Hybrid Acquisition of Temporal Scopes for RDF Data Anisa Rula | Matteo Palmonari | Axel-Cyrille Ngonga Ngomo | Daniel Gerber | Jens Lehmann | Lorenz Bühmann

#### 14:50

Detecting Incorrect Numerical Data in DBpedia Dominik Wienand | Heiko Paulheim

# **VOCABULARIES, SCHEMAS, ONTOLOGIES**

Room Polymnia/Erato/Kalia/Melpo | Thursday 29th | 14:00 - 15:15

**Session Chair: Martin Hepp** 

#### 14.00

Object Property Matching utilizing the Overlap between Imported Ontologies Benjamin Zapilko | Brigitte Mathiak

#### 14:25

Towards Competency Question-driven Ontology Authoring Yuan Ren | Artemis Parvizi | Chris Mellish | Jeff Z. Pan | Kees Van Deemter | Robert Stevens

#### 14:50

Identifying change patterns of concept attributes in ontology evolution

Duy Dinh | Julio Cesar Dos Reis | Cedric Pruski | Marcos Da Silveira | Chantal Reynaud

# **BEST WORKSHOP PAPERS**

Room Orpheas | Thursday 29th | 14:00 - 15:15

**Session Chair: Harald Sack** 

- 01. Ontology Design Patterns: Adoption Challenges and Solutions Karl Hammar
- 02. CROCUS: Cluster-based ontology data cleansing
  Didier Cherix | Ricardo Usbeck | Andreas Both | Jens Lehmann
- 03. Entity-based Data Source Contextualization for Searching the Web of Data Andreas Wagner | Peter Haase | Achim Rettinger
- 04. Adapting Sentiment Lexicons using Contextual Semantics for Twitter Sentiment Analysis Hassan Saif | Yulan He | Mirim Fernandez | Harith Alani
- 05. RESTful or RESTless -- Current State of Today's Top Web APIs Frederik Bülthoff | Maria Maleshkova
- 06. Ornithology Based on Linking Bird Observations with Weather Data Mikko Koho | Eero Hyvönen | Aleksi Lehikoinen
- 07. Harvesting Ontology Authoring Data with Protégé Markel Vigo | Caroline Jay | Robert Stevens

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- 08. Survey of Semantic Media Annotation Tools for the Web: Towards new Media Applications with Linked Media Lyndon Nixon | Raphaël Troncy
- 09. First experiments in cultural alignment repair
  Jérome Fuzenat
- Emergency vehicle routing using Geolinked Open Data for the Municipality of Catania Sergio Consoli | Aldo Gangemi | Andrea Giovanni Nuzzolese | Silvio Peroni | Diego Reforgiato | Daria Spampinato
- 11. Amending RDF Entities with New Facts Ziawasch Abedjan | Felix Naumann
- Predicting the impact of central bank communications on financial market investors' interest rate expectations
   Andy Moniz | Franciska de Jong

# **LINKED OPEN DATA IV**

Room Hermes/Apollon | Thursday 29th | 15:45 - 16:35

**Session Chair: Elena Simperl** 

#### 15:45

A Scalable Approach for Efficiently Generating Structured Dataset Topic Profiles

Besnik Fetahu | Stefan Dietze | Bernardo Pereira Nunes | Marco Antonio Casanova | Davide Taibi |

Wolfgang Nejdl

#### 16:10

Facilitating Human Intervention in Coreference Resolution with Comparative Entity Summaries Danyun Xu | Gong Cheng | Yuzhong Qu

# **IN-USE & INDUSTRIAL III**

Room Polymnia/Erato/Kalia/Melpo | Thursday 29th | 15:45 - 16:35

**Session Chair: Evelyne Viegas** 

#### 15:45

"Semantics Inside!" But let's not tell the Data Miners: Intelligent Support for Data Mining Jörg-Uwe Kietz | Floarea Serban | Simon Fischer and Abraham Bernstein.

#### 16:10

Matware: Constructing and Exploiting Domain Specific Warehouses by Aggregating Semantic Yannis Tzitzikas | Nikos Minadakis | Yannis Marketakis | Pavlos Fafalios | Carlo Allocca | Michalis Mountantonakis | Ioanna Zidianaki.

# WRAP-UP SESSION (WORKSHOPS, TUTORIALS, PHD SYMPOSIUM)

Room Orpheas | Thursday 29th | 15:45 - 16:35

#### 15.45

Workshops and Tutorials Wrap-up

Session Chairs: Harald Sack | Nathalie Aussenac-Gilles

#### 16:10

PhD Symposium Summary

Session Chairs: Steffen Staab | Mathieu d'Aquin

# **CLOSING AND AWARDS CEREMONY**

Room Hermes/Apollon | Thursday 29th | 16:35

# **ESWC2014 Venues**

# PRECONFERENCE WORKSHOPS & TUTORIALS MAIN CONFERENCE

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## **REGISTRATION DESK**

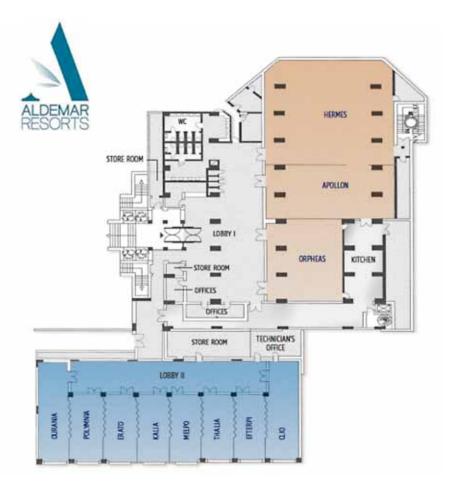
The Venue features a registration desk for check in. Participants must check in prior to the conference. With check in all participants will receive the necessary documents & information for the conference. On site registration is possible.

# **Accepted methods of payment:**

Cash, Credit Card

## **OPENING HOURS**

Sunday	08:30 - 18:00
Monday	08:30 - 18:00
Tuesday	08:00 - 18:30
Wednesday	08:00 - 18:30
Thursday	08·00 - 18·00



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