



Science Meeting – Scientific Report

The scientific report (WORD or PDF file - maximum of seven A4 pages) should be submitted online within two months of the event. It will be published on the ESF website.

Proposal Title: Student Support for participation at ECIR 2015

Application Reference N°: 5562

1) Summary (up to one page)

The 37th European Conference on Information Retrieval took place from the 29th of March to the 2nd of April 2015 in Vienna, Austria (<http://ecir2015.ifs.tuwien.ac.at>). The conference was organised by the Institute of Software Technology and Interactive Systems of the TU Wien, supported by the Austrian Computer Society. The conference took place in the lecture theatres of the TU Wien, in the 4th district of Vienna, close to the centre of the city.

The annual European Conference on Information Retrieval is the main European forum for the presentation of new research results in the field of Information Retrieval. ECIR encourages the submission of high quality research papers on a variety of topics reporting original, previously unpublished results.

The main goal is to bring together researchers from all over the world to share their latest research results and insights in the field of Information Retrieval, to share their knowledge, not only between academic researchers but also between academic researchers and industry researchers. An industry day was part of the program.

ECIR is traditionally an important meeting point for young researchers in the field, and the student support from ELIAS helped encourage strong student participation. The five workshops and five tutorials organised on the first day of the conference were particularly appreciated by the young researchers.

ECIR 2015 received a total of 305 submissions in three categories: 190 full papers, 103 short papers, and 12 demonstrations. The geographical distribution of the submissions was as follows: 54% were from Europe, 18% from Asia, 17% from North and South America, 5% from Australasia, and 6% from North Africa and the Middle East. All submissions were reviewed by at least three members of an international two-tier Program Committee. Of the full papers submitted to the conference, 44 were accepted

for oral presentation (23%). Of the short papers submitted to the conference, 39 were accepted for poster presentation (38%). In addition, seven demonstrations (58%) were accepted. The full conference proceedings are published in Springer LNCS (<http://www.springer.com/us/book/9783319163536>).

2) Description of the scientific content of and discussions at the event (up to four pages)

On Sunday the 29th of March, five tutorials and five workshops were held. The main part of the conference was held between Monday the 30th of March and Wednesday the 1st of April, where the 44 accepted papers, 39 accepted posters and 7 accepted demonstrations were presented. An Industry Day was held on Thursday the 2nd of April. Four of the tutorials and a conference session were devoted to evaluation topics. An innovation of the ECIR 2015 was the introduction of the *Reproducible IR Research Track*, which encouraged the publication of reproducible evaluation experiments.

Keynotes

ECIR 2015 included three keynote talks:

- Marti Hearst (University of California, Berkeley) – *Still Haven't Found What I'm Looking For: Suggestions for Search Research*
- Ryen W. White (Microsoft Research) – *Mining and Modeling Online Health Search*
- Stefan Thurner (Medical University of Vienna) – *What to Do If You Know Everything? Studying Human Behavior in a Virtual World*

Marti Hearst presented a well-structured list of search problems that have not been solved yet, the long tail of research challenges. These include book, software, courseware and scientific search, as well as effective user interfaces to facilitate collaborative search. These problems will likely serve as inspiration for many of the students attending the ECIR.

The second keynote talk was allocated for the recipient of the 2014 Karen Spärck Jones Award. This award was created by the Information Retrieval Specialist Group of the British Computer Society (BCS IRSG) in conjunction with the BCS to commemorate the achievements of Karen Spärck Jones. This annual award is to encourage and promote talented researchers who have endeavoured to advance our understanding of IR and natural language processing with significant experimental contributions. The 2014 KSJ Award was given to Ryen W. White, who presented an overview of his extensive work on the behaviour of users searching for health and medical information on the web.

In Information Retrieval, we usually have to make many assumptions about the context of a search or of the user of a recommender system. The third talk presented the complete opposite to this situation. Stefan Thurner presented the work that he and his group have done on analysing an online multiplayer game in which they know everything about all interactions between all players, including who is friends with whom, who has spoken to whom, but also who is enemies with whom. Using this data, they were able to produce some ground breaking results in computational social science, some of which were presented in the talk.

Reproducible IR Research Track

An innovation of the ECIR 2015 was the Reproducible IR Research Track. Reproducibility is key for establishing research to be reliable, referenceable and extensible for the future. Experimental papers are therefore most useful when their

results can be tested and generalized by peers. This track specifically invited submission of papers reproducing a single or a group of papers in which the authors of the submitted paper had not been involved. It was requested that submitted papers emphasize the motivation for selecting the paper(s), the process of how results have been attempted to be reproduced (successful or not), the communication that was necessary to gather all information, the potential difficulties encountered and the result of the process. A successful reproduction of the work was not a requirement, but it was important to provide a clear and rigorous evaluation of the process to allow lessons to be learned for the future.

Seven papers were submitted to this track, of which three were accepted for oral presentation in a special session on the first day of the conference. After the presentation of the paper, a panel made up of Norbert Fuhr, Jaap Kamps, Diane Kelly and Udo Kruschwitz and chaired by Andreas Rauber debated on *Evaluating IR Research: A Technical or Social Science?* There was lively participation from the audience in this debate covering the advantages and disadvantages of evaluation approaches ranging from the classic Cranfield paradigm to user studies. The importance of reproducibility of results was a central theme of this debate.

Tutorial – A Formal Approach to Effectiveness Metrics for Information Access: Retrieval, Filtering, and Clustering

This tutorial was presented by Enrique Amigó, Julio Gonzalo and Stefano Mizzaro. They presented, reviewed, and compared the most popular evaluation metrics for some of the most salient information related tasks, covering: (i) Information Retrieval, (ii) Clustering, and (iii) Filtering. The tutorial made a special emphasis on the specification of constraints for suitable metrics in each of the three tasks, and on the systematic comparison of metrics according to how they satisfy such constraints. This comparison provides criteria to select the most adequate metric or set of metrics for each specific information access task. The last part of the tutorial investigated the challenge of combining and weighting metrics.

Tutorial – Measuring Document Retrievability

This tutorial was presented by Leif Azzopardi. Retrievability is an important and interesting indicator that can be used in a number of ways to analyse Information Retrieval systems and document collections. Rather than focusing totally on relevance, retrievability examines what is retrieved, how often it is retrieved, and whether a user is likely to retrieve it or not. This is important because a document needs to be retrieved, before it can be judged for relevance. In this tutorial, the concept of retrievability along with a number of retrievability measures, how it can be estimated and how it can be used for analysis were explained. Since retrieval precedes relevance, an overview of how retrievability relates to effectiveness -- describing some of the insights that researchers have discovered thus far, was also provided. The tutorial also showed how retrievability relates to efficiency, and how the theory of retrievability can be used to improve both effectiveness and efficiency. This was followed by an overview of the different applications of retrievability such as Search Engine Bias, Corpus Profiling, etc., before wrapping up with challenges and opportunities. The final session of the day looked at example problems and ways to analyse and apply retrievability to other problems and domains.

Tutorial – Visual Analytics for Information Retrieval Evaluation

Nicola Ferro and Giuseppe Santucci presented this tutorial. Measuring is a key to scientific progress. This is particularly true for research concerning complex systems, whether natural or human-built. Multilingual and multimedia information systems are

increasingly complex: they need to satisfy diverse user needs and support challenging tasks. Their development calls for proper and new evaluation methodologies to ensure that they meet the expected user requirements and provide the desired effectiveness.

The tutorial introduced basic and intermediate concepts about laboratory-based evaluation of information retrieval systems, its pitfalls, and shortcomings and complemented them with a recent and innovative angle to evaluation: the application of methodologies and tools coming from the visual analytics domain for better interacting, understanding, and exploring the experimental results and IR system behaviour.

Tutorial – Join the Living Lab: Evaluating News Recommendations in Real-time

Frank Hopfgartner and Torben Brodt presented this tutorial. Participants learned how to participate in CLEF-NEWSREEL, a living lab on the evaluation of news recommender algorithms. Various research challenges can be addressed within CLEF-NEWSREEL, including the development and evaluation of collaborative filtering and content based filtering strategies. Satisfying information needs by techniques including preference elicitation, pattern recognition, and prediction, recommender systems connect the research areas information retrieval and machine learning.

Tutorial – Statistical Power Analysis for Sample Size Estimation in Information Retrieval Experiments with Users

This tutorial was presented by Diane Kelly. One critical decision researchers must make when designing laboratory experiments with users is how many participants to study. In interactive information retrieval, the determination of sample size is often based on heuristics and limited by practical constraints such as time and finances. As a result, many studies are underpowered and it is common to see researchers make statements like “With more participants significance might have been detected,” but what does this mean? What does it mean for a study to be underpowered? How does this affect what we are able to discover, how we interpret study results and how we make choices about what to study next? How does one determine an appropriate sample size? What does it even mean for a sample size to be appropriate? This tutorial addressed these questions by introducing participants to the use of statistical power analysis for sample size estimation in laboratory experiments with users. In discussing this topic, the issues of effect size, Type I and Type II errors and experimental design, including choice of statistical procedures, were addressed.

Workshop – Second International Workshop on Gamification for Information Retrieval (GamifIR’15)

This workshop was organised by Frank Hopfgartner, Gabriella Kazai, Udo Kruschwitz, Michael Meder and Mark Shovman. Gamification is a popular methodology describing the trend of applying game design principles and elements, such as feedback loops, points, badges or leader boards in non-gaming environments. Gamification can have several different objectives. Besides just increasing the fun factor, these could be, for example, to achieve more accurate work, better retention rates and more cost effective solutions by relating motivations for participating as more intrinsic than conventional methods. In the context of Information Retrieval (IR), there are various tasks that can benefit from gamification techniques. Examples include the manual annotation of documents in IR evaluation and participation in user studies to tackle interactive IR challenges. Gamification, however, comes with its own challenges and its adoption in IR is still in its infancy.

The Second International Workshop on Gamification for Information Retrieval (GamifIR’15) focused on the challenges and opportunities that gamification can present

for the IR community. The workshop brought together researchers and practitioners from a wide range of areas including game design, information retrieval, human-computer interaction, computer games, and natural language processing.

Workshop – Supporting Complex Search Tasks

This workshop was organised by Maria Gade, Mark Hall, Hugo Huurdeman, Jaap Kamps, Marijn Koolen, Mette Skov, Elaine Toms and David Walsh. There is broad consensus in the field of IR that search is complex in many use cases and applications, both on the Web and in domain specific collections, and both professionally and in daily life. Yet our understanding of complex search tasks, in comparison to simple look up tasks, is fragmented at best.

The workshop addressed the many open research questions: What are the obvious use cases and applications of complex search? What are essential features of work tasks and search tasks to take into account? And how do these evolve over time? With a multitude of information, varying from introductory to specialized, and from authoritative to speculative or opinionated, when to show what sources of information? How does the information seeking process evolve and what are relevant differences between different stages? With complex task and search process management, blending searching, browsing, and recommendations, and supporting exploratory search to sensemaking and analytics, UI and UX design pose an overconstrained challenge. How do we know that our approach is any good?

Workshop – Fifth Workshop on Context-awareness in Retrieval and Recommendation (CaRR 2015)

This workshop was organised by Ernesto William De Luca, Alan Said, Fabio Crestani and David Elsweiler. Context-aware information is widely available in various ways such as interaction patterns, devices, annotations, query suggestions and user profiles and is becoming more important for enhancing retrieval performance. At the moment, the main issue to cope with is not only retrieving the most relevant items and content, but defining them ad hoc. Further relevant issues are personalizing and adapting the information and the way it is displayed to the user's current situation (device, location, social surrounding) and interests.

The workshop focused on integration notions of social context into retrieval and recommendation. Context is seen as a general factor regarding the user, item, system, etc. e.g. location, weather, mood. The need of personalizing and adapting information is accentuated when we consider this kind of device- and interaction-based context. The CaRR Workshop invited the community to a discussion on new, creative ways to handle context-awareness.

Workshop – Second International Workshop on Bibliometric-enhanced Information Retrieval

This workshop was organised by Philipp Mayr, Ingo Frommholz, Peter Mutschke and Andrea Scharnhorst. Bibliometric techniques are not yet widely used to enhance retrieval processes in digital libraries, although they offer value-added effects for users. This workshop explored how statistical modelling of scholarship, such as Bradfordizing or network analysis of coauthorship network, or simple citation graphs, can improve retrieval services for specific communities, as well as for large, cross-domain collections like Mendeley. This workshop raised awareness of the missing link between Information Retrieval (IR) and bibliometrics/scientometrics and created a common ground for the incorporation of bibliometric-enhanced services into retrieval at the scholarly search engine interface. The second BIR workshop (BIR2015) had the goal of applying insights

from bibliometrics, scientometrics, and informetrics to concrete, practical problems of information retrieval and browsing.

Workshop –Multimodal Retrieval in the Medical Domain (MRMD 2015)

This workshop was organised by Henning Müller, Oscar Jiménez Del Toro, Allan Hanbury, Georg Langs and Antonio Foncubierta-Rodríguez. Medical information is of interest to a wide variety of users, including patients and their families, researchers, general practitioners and clinicians, and practitioners with specific expertise such as radiologists. There are several dedicated services that seek to make this information more easily accessible, such as Health on the Net's medical search systems for the general public and medical practitioners ([\url{http://www.hon.ch/}](http://www.hon.ch/)). Despite the popularity of the medical domain for users of search engines, and current interest in this topic within the information retrieval research community, development of search and access technologies remains particularly challenging. This workshop brought together researchers working on this challenge, in particular those working at the interface between medical text and image retrieval. The results of the VISCERAL Retrieval Benchmark were also presented at this workshop.

3) Assessment of the results and impact of the event on the future directions of the field (up to two pages)

There were two main innovations at the ECIR 2015. The first was the Reproducible IR Research Track, and the second was the new format for the Industry Day.

The Reproducible IR Research Track encouraged some very interesting papers, presentations and discussion. In particular, the discussion among the members of the Programme Committee for this track was intense, leading to the identification of the following three aspects of reproducibility:

- **Scientific aspect:** an experimental result is independently reproduced under different conditions
- **Impact aspect:** a surprising result is reproduced and shown to hold, or a result obtained on proprietary data is shown to hold on publicly available data
- **Further reproducibility aspect:** All materials (code and data) used to reproduce the result are made available

Only the first aspect was explicitly requested from papers submitted to the Reproducible IR track in 2015, and therefore acceptance decisions were made based only on this aspect. Future tracks could consider expanding the requirements to the second and third aspect.

The Reproducible IR Research track was considered to make a strong contribution to the development of an increasingly important topic in information retrieval (and computer science in general), and will be continued at the ECIR 2016.

The second innovation was the new format of the Industry Day. In contrast to industry days in the last few editions of the ECIR, which were held in parallel to the conference sessions, the ECIR 2015 industry day was a stand-alone event held on the day after the main conference programme. The 2015 Industry Day was chaired by Jussi Karlgren and Paul Ogilvie. A further departure from the traditional ECIR industry days was the focus on start-ups and smaller niche companies in the information retrieval area, instead of on large established search companies.

The Industry Day began with a keynote talk by William Stevens of Europe Unlimited, a company specialising in bringing together entrepreneurs with venture capital. This was followed by a lively discussion of various aspects of running a start-up, from investment to exit strategies. Representatives of eight companies then gave short presentations, with the age of the companies ranging from recently founded (Lumi, Signal, Unbabel) through established (Precognox, Spinqe, Seznam, Catalyst) to long established (Thomson Reuters). The Industry Day was well attended, with over 70 people attending at the peak.

The Industry Day was a great success, especially in terms of the amount of audience participation. This format for the Industry Day was also considered to be of particular use to young researchers, who were exposed to the possibility to innovate by launching their own start-up, as opposed to going to work for a large established search company. Much practical advice on strategies for start-ups was delivered by the many experienced people present.

A useful suggestion from the attendees for future ECIR conferences is to have a structured way of putting together the companies looking to hire people with those people looking for jobs.

4) Annexes 4a) and 4b): Programme of the meeting and full list of speakers and participants

The full conference programme is attached.

The list of supported students has been entered into the online system.



ECIR
2015
29 MARCH - 02 APRIL
VIENNA, AUSTRIA

Programme Guide

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Conference Programme Overview

	09:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00
Sunday	WS: CaRR Room: 188/2	WS: MRMD Room: 388	WS: GamifIR Room: von Neumann	Tutorial: VAIRE Room: Gödel	WS: Supporting Complex ...	Tutorial: Measuring Doc. Retrieval ...	Tutorial: Formal Appr. to Eff. ...	Keynote	Keynote	Keynote	Keynote	Keynote
Monday	WS: Supporting Complex ...	Tutorial: Measuring Doc. Retrieval ...	Tutorial: Formal Appr. to Eff. ...	Reproducible IR	Cross-Lingual and Discourse	Recommender Systems	Social Media	Specific Search Tasks	Panel	Panel	Panel	Panel
Tuesday	KSJ Award	KSJ Keynote	Sentiment and Opinion	Event Mining and Summa- rization	Keynote	Keynote	Keynote	Keynote	Keynote	Keynote	Keynote	Keynote
Wednesday	Keynote	Keynote	Keynote	Keynote	Keynote	Keynote	Keynote	Keynote	Keynote	Keynote	Keynote	Keynote
Thursday	Welcome	Welcome	Welcome	Welcome	Welcome	Welcome	Welcome	Welcome	Welcome	Welcome	Welcome	Welcome

Zemanek 187/2 187/2

E17 E19

Welcome to Vienna!

Welcome to ECIR 2015, the 37th European Conference on Information Retrieval. The event has been jointly organised by the Institute of Software Technology and Interactive Systems of the Vienna University of Technology and the Austrian Computer Society. The conference brings together more than 200 people for five days of presentations, tutorials, workshops, keynotes, a poster and demo session, an industry day, and social events.

Venue

The conference takes place at the **Vienna University of Technology**, located close to the historic centre of Vienna and a few hundred meters away from the Vienna opera house and the St. Charles' Church.

The exact address of the locations are

Vienna University of Technology
Electrotechnical Institute
Gußhausstraße 27-29
1040 Vienna

Conference (Monday-Wednesday)
Industry Day (Thursday)

and

Vienna University of Technology
Faculty of Informatics
Favoritenstraße 9-11
1040 Vienna

Tutorials, Workshops, Welcome Reception
(Sunday)

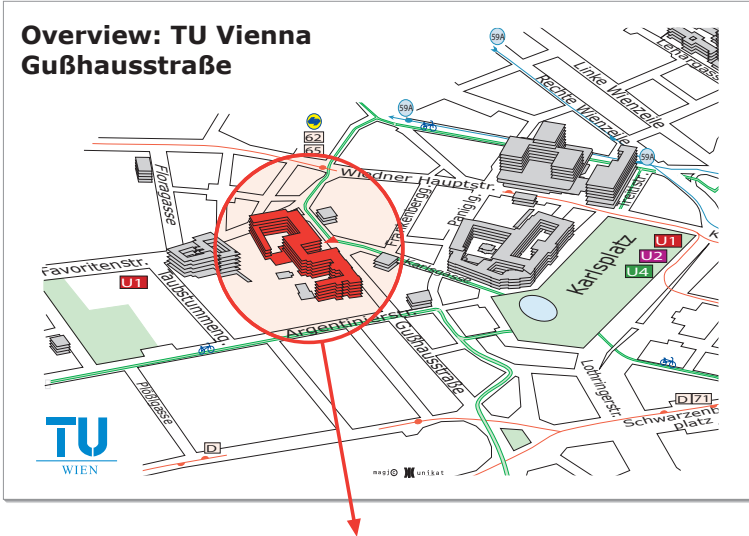
The Vienna University of Technology looks back on a long tradition at the leading edge of scientific research and education: Founded in 1815 as k.k. Polytechnisches Institut (Imperial and Royal Polytechnical Institute), it was divided into 5 faculties in 1865. One year later the first freely elected rector was inaugurated.

In 1872 its name changed to Technische Hochschule (College of Technology), and in 1902 the first doctorates were awarded. The institution has borne its current name – Technische Universität Wien (Vienna University of Technology) – since 1975. In 2004 TU Vienna reached full autonomy through the University Act 2002.

More information on www.tuwien.ac.at/en/about_us

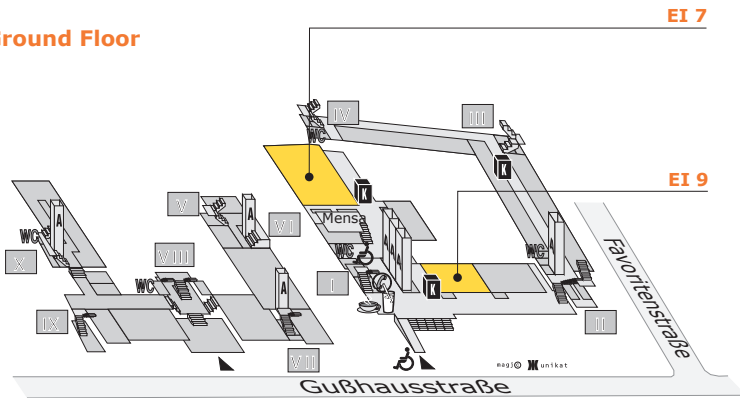


Overview: TU Vienna Gußhausstraße



Detailed drawing

Ground Floor



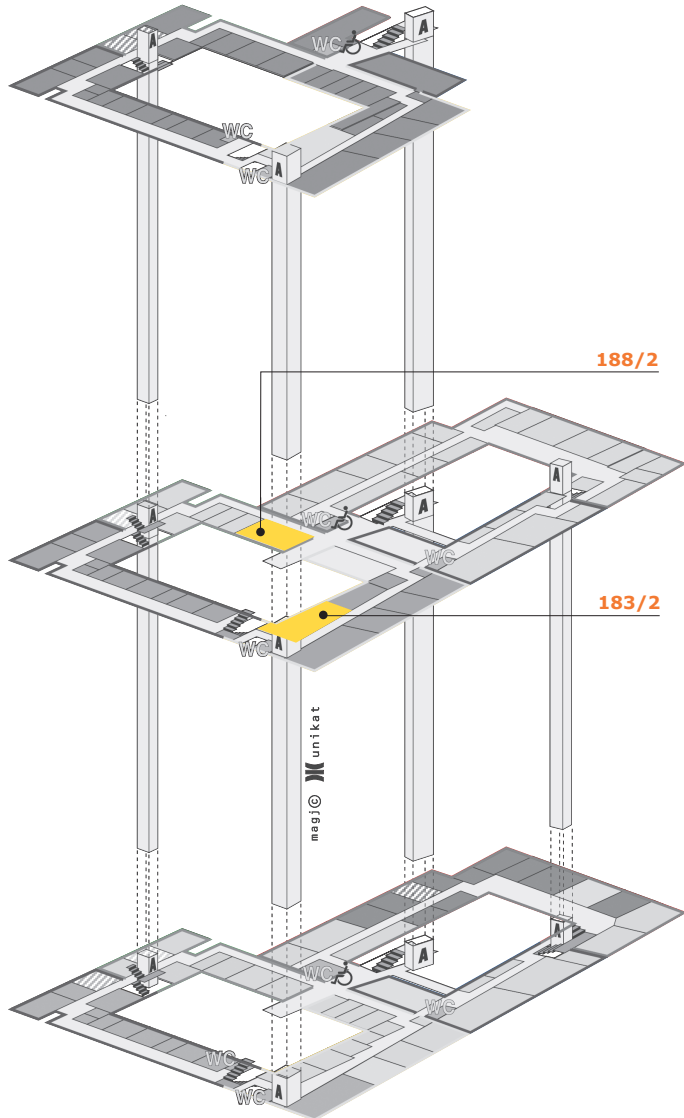
Tutorial and workshop venues

A-1040 Wien, Favoritenstraße 9-11

5th floor

4th floor

3rd floor

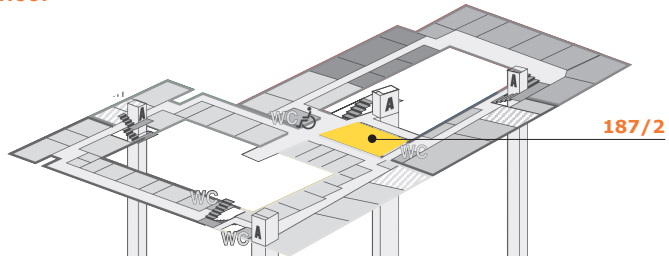




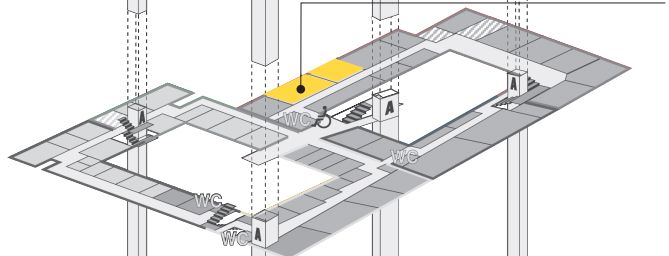
Tutorial and workshop venues

A-1040 Wien, Favoritenstraße 9-11

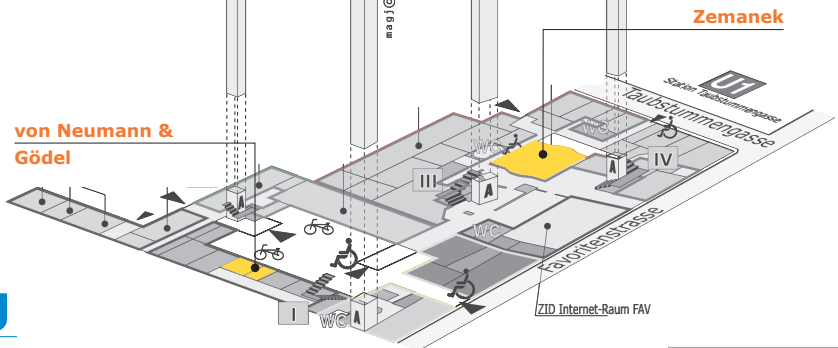
2nd floor



1st floor



ground floor



Useful Information

Registration/Help desk

The registration/help desk is located on the ground floor and is open every day of the conference from 8:00.

Name badges

Conference participants are required to wear their badges while in the conference area in order to facilitate identification of registered participants.

Coffee breaks

Coffee, refreshments and snacks are provided in the foyer.

Lunch

Lunch is served in the foyer.

Internet access

Wireless LAN internet access will be provided free of charge in the conference building. The login information is handed out with the conference bag upon registration.

Accompanying persons

Additional tickets for the Conference Dinner can be bought on-site at the registration desk.

Taxi

To request a taxi call one of the following numbers: +43 1 60 160 or +43 1 40 100

Useful links

Public transportation information: www.wienerlinien.at

Vienna tourist information: www.wien.info/en/travel-info/tourist-info

Important phone number

Registration/Help desk (Christine Haas): +43 664 886 74 872

Conference Programme

Sunday, March 29

08:00	Registration/Help desk opens	Foyer
09:00 – 10:30	Morning Workshops/Tutorials	
10:30 – 11:00	Coffee break	Foyer
11:00 – 12:30	Morning Workshops/Tutorials	
12:30 – 13:45	Lunch	Foyer
13:45 – 15:15	Afternoon Workshops/Tutorials	
15:15 – 15:45	Coffee break	Foyer
15:45 – 17:15	Afternoon Workshops/Tutorials	
17:30 – 20:00	Welcome Reception	Foyer

	Room	Morning	Afternoon	Whole Day
Workshop: CaRR	188/2 (4th floor)			●
Workshop: MRMD	388 (1st floor)			●
Workshop: GamifIR	von Neumann (ground floor)			●
Tutorial: VAIRE	Gödel (ground floor)			●
Workshop: Supporting Complex Search Tasks	Zemanek (ground floor)	●		
Tutorial: Measuring Document Retrievability	183/2 (4th floor)	●		
Tutorial: Formal Approach to Effectiveness Metrics for Information Access	187/2 (2nd floor)	●		
Workshop: Bibliometric-Enhanced IR	183/2 (4th floor)		●	
Tutorial: Statistical Power Analysis	Zemanek (ground floor)		●	
Tutorial: Living Lab	187/2 (2nd floor)		●	

Monday, March 30

08:00	<i>Registration/Help desk opens</i>	<i>Foyer</i>
09:00 – 09:15	Welcome <i>by Chairs and PC Chairs</i>	<i>Room: E1 7</i>
09:15 – 10:30	Opening Keynote: Marti Hearst "Still Haven't Found What I'm Looking For: Suggestions for Search Research" <i>Chair: Mihai Lupu</i>	<i>Room: E1 7</i>
10:30 – 11:00	<i>Coffee break</i>	<i>Foyer</i>
11:00 – 12:15	Session – Reproducible IR <i>Chair: Norbert Fuhr</i>	<i>Room: E1 7</i>
	Twitter Sentiment Detection via Ensemble Classification Using Averaged Confidence Scores <i>Matthias Hagen, Martin Potthast, Michel Buechner and Benno Stein</i>	
	Reproducible Experiments on Lexical and Temporal Feedback for Tweet Search <i>Jinfeng Rao, Jimmy Lin and Miles Efron</i>	
	Rank-Biased Precision Reloaded: Reproducibility and Generalization <i>Nicola Ferro and Gianmaria Silvello</i>	
12:15 – 13:45	<i>Lunch</i>	<i>Foyer</i>
13:45 – 15:00	Panel – Evaluating IR Research: A Technical or Social Science? <i>Chair: Andreas Rauber</i> <i>Members: Norbert Fuhr, Jaap Kamps, Diane Kelly, Udo Kruschwitz</i>	<i>Room: E1 7</i>
15:00 – 15:30	<i>Coffee break</i>	<i>Foyer</i>
15:30 – 16:45	Sessions	
	Topic Models <i>Chair: Fabio Crestani</i>	<i>Room: E1 7</i>
	Prediction of Venues in Foursquare using Flipped Topic Models <i>Wen Haw Chong, Bing Tian Dai and Ee-Peng Lim</i>	
	Geographical Latent Variable Models for Microblog Retrieval <i>Alexander Kotov, Vineeth Rakesh, Eugene Agichtein and Chandan Reddy</i>	
	Nonparametric Topic Modeling using Chinese Restaurant Franchise with Buddy Customers <i>Shoaib Jameel, Wai Lam and Lidong Bing</i>	
	Evaluation <i>Chair: Nicola Ferro</i>	<i>Room: E1 9</i>
	A Discriminative Approach to Predicting Assessor Accuracy <i>Hyun Joon Jung and Matthew Lease</i>	

more on next page ↓

WHOSE – A Tool for Whole-Session Analysis in IIR

Daniel Hienert, Wilko van Hoek, Alina Weber and Dagmar Kern

Looking for Books in Social Media: An Analysis of Complex Search Requests

Marijn Koolen, Toine Bogers, Antal van den Bosch and Jaap Kamps

16:45 –
19:00

Poster and Demo Session

Refreshments provided

Foyer

Posters

Aggregated Search and Diversity

On-topic Cover Stories from News Archives

Christian Schulte, Bilyana Taneva, and Gerhard Weikum

Classification

Multi-emotion Detection in User-Generated Reviews

Lars Buitinck, Jesse van Amerongen, Ed Tan, and Maarten de Rijke

Classification of Historical Notary Acts with Noisy Labels

Julia Efremova, Alejandro Montes García, and Toon Calders

ConceptFusion: A Flexible Scene Classification Framework

Mustafa Ilker Sarac, Ahmet Iscen, Eren Golge, and Pinar Duygulu

An Audio-Visual Approach to Music Genre Classification through Affective Color Features

Alexander Schindler and Andreas Rauber

Cross-Lingual

Distributional Correspondence Indexing for Cross-Language Text Categorization

Andrea Esuli and Alejandro Moreo Fernández

Evaluation

How Do Gain and Discount Functions Affect the Correlation between DCG and User Satisfaction?

Julián Urbano and Mónica Marrero

Different Rankers on Different Subcollections

Timothy Jones, Falk Scholer, Andrew Turpin, Stefano Mizzaro, and Mark Sanderson

Retrievability and Retrieval Bias: A Comparison of Inequality Measures

Colin Wilkie and Leif Azzopardi

Judging Relevance Using Magnitude Estimation

Eddy Maddalena, Stefano Mizzaro, Falk Scholer, and Andrew Turpin

Information Extraction

A Self-training CRF Method for Recognizing Product Model Mentions in Web Forums

Henry S. Vieira, Altigran S. da Silva, Marco Cristo, and Edleno S. de Moura

Information Extraction Grammars

Mónica Marrero and Julián Urbano

Target-Based Topic Model for Problem Phrase Extraction

Elena Tutubalina

On Identifying Phrases Using Collection Statistics

Simon Gog, Alistair Moffat, and Matthias Petri

MIST: Top-k Approximate Sub-string Mining Using Triplet Statistical Significance

Sourav Dutta

Recommender Systems

Time-Sensitive Collaborative Filtering through Adaptive Matrix Completion

Julien Gaillard and Jean-Michel Renders

Toward the New Item Problem: Context-Enhanced Event Recommendation in Event-Based Social Networks

Zhenhua Wang, Ping He, Lidan Shou, Ke Chen, Sai Wu, and Gang Chen

On the Influence of User Characteristics on Music Recommendation Algorithms

Markus Schedl, David Hauger, Katayoun Farrahi, and Marko Tkalčič

A Study of Smoothing Methods for Relevance-Based Language Modelling of Recommender Systems

Daniel Valcarce, Javier Parapar, and Álvaro Barreiro

The Power of Contextual Suggestion

Adriel Dean-Hall and Charles L.A. Clarke

Semantic and Graph-Based Models

Entity Linking for Web Search Queries

Deepak P., Sayan Ranu, Prithu Banerjee, and Sameep Mehta

Sentiment and Opinion

Learning Sentiment Based Ranked-Lexicons for Opinion Retrieval

Filipa Peleja and João Magalhães

Topic-Dependent Sentiment Classification on Twitter

Steven Van Canneyt, Nathan Claeys, and Bart Dhoedt

Learning Higher-Level Features with Convolutional Restricted Boltzmann Machines for Sentiment Analysis

Trung Huynh, Yulan He, and Stefan Rügger

Social Media

Detecting Location-Centric Communities Using Social-Spatial Links with Temporal Constraints

Kwan Hui Lim, Jeffrey Chan, Christopher Leckie, and Shanika Karunasekera

Using Subjectivity Analysis to Improve Thread Retrieval in Online Forums

Prakhar Biyani, Sumit Bhatia, Cornelia Caragea, and Prasenjit Mitra

Selecting Training Data for Learning-Based Twitter Search

Dongxing Li, Ben He, Tiejian Luo, and Xin Zhang

Content-Based Similarity of Twitter Users

Stefano Mizzaro, Marco Pavan, and Ivan Scagnetto

Specific Search Tasks

PatNet: A Lexical Database for the Patent Domain

Wolfgang Tannebaum and Andreas Rauber

Learning to Rank Aggregated Answers for Crossword Puzzles

Massimo Nicosia, Gianni Barlacchi, and Alessandro Moschitti

Diagnose This If You Can: On the Effectiveness of Search Engines in Finding Medical Self-diagnosis Information

Guido Zuccon, Bevan Koopman, and João Palotti

Sources of Evidence for Automatic Indexing of Political Texts

Mostafa Dehghani, Hosein Azarbonyad, Maarten Marx and Jaap Kamps

Automatically Assessing Wikipedia Article Quality by Exploiting Article–Editor Networks

Xinyi Li, Jintao Tang, Ting Wang, Zhunchen Luo, and Maarten de Rijke

Temporal Models and Features

Document Priors Based On Time-Sensitive Social Signals

Ismail Badache and Mohand Boughanem

Topic and Document Models

A Hierarchical Tree Model for Update Summarization

Rumeng Li and Hiroyuki Shindo

Document Boltzmann Machines for Information Retrieval

Qian Yu, Peng Zhang, Yuexian Hou, Dawei Song, and Jun Wang

Effective Healthcare Advertising Using Latent Dirichlet Allocation and Inference Engine

Yen-Chiu Li and Chien Chin Chen

User Behaviour

User Behavior in Location Search on Mobile Devices

Yaser Norouzzadeh Ravari, Ilya Markov, Artem Grotov, Maarten Clements, and Maarten de Rijke

Detecting the Eureka Effect in Complex Search

Hui Yang, Jiyun Luo, and Christopher Wing

Demonstrations

Knowledge Journey Exhibit: Towards Age-Adaptive Search User Interfaces

Tatiana Gossen, Michael Kotzyba, and Andreas Nürnberger

PopMeter: Linked-Entities in a Sentiment Graph

Filipa Peleja

Adaptive Faceted Ranking for Social Media Comments

Elaheh Momeni, Simon Braendle, and Eytan Adar

Signal: Advanced Real-Time Information Filtering

Miguel Martínez-Alvarez, Udo Kruschwitz, Wesley Hall, and Massimo Poesio

The iCrawl Wizard – Supporting Interactive Focused Crawl Specification

Gerhard Gossen, Elena Demidova, and Thomas Risse

Linguistically-Enhanced Search over an Open Diachronic Corpus

Rafael C. Carrasco, Isabel Martínez-Sempere, Enrique Mollá-Gandía, Felipe Sánchez-Martínez, Gustavo Candela Romero, and María Pilar Escobar Esteban

From Context-Aware to Context-Based: Mobile Just-In-Time Retrieval of Cultural Heritage Objects

Jörg Schlötterer, Christin Seifert, Wolfgang Lutz, and Michael Granitzer

Tuesday, March 31

08:00	<i>Registration/Help desk opens</i>	<i>Foyer</i>
09:00 – 09:15	Announcement of the KSJ Award	<i>Room: EI 7</i>
09:15 – 10:30	KSJ Keynote: Ryen White “Mining and Modeling Online Health Search” <i>Chair: John Tait</i>	<i>Room: EI 7</i>
10:30 – 11:00	<i>Coffee break</i>	<i>Foyer</i>
11:00 – 12:15	Sessions	
	Cross-Lingual and Discourse <i>Chair: Wessel Kraaij</i>	<i>Room: EI 7</i>
	Multi-Modal Correlated Centroid Space for Multi-Lingual Cross-Modal Retrieval <i>Aditya Mogadala and Achim Rettinger</i>	
	A Discourse Search Engine based on Rhetorical Structure Theory <i>Pascal Kuyten, Danushka Bollegala, Bernd Hollerit, Helmut Prendinger and Kiyoharu Aizawa</i>	
	Knowledge-based Representation for Transductive Multilingual Document Classification <i>Salvatore Romeo, Dino Ienco and Andrea Tagarelli</i>	
	Recommender Systems <i>Chair: Markus Schedl</i>	<i>Room: EI 9</i>
	Active Learning applied to Rating Elicitation for Incentive Purposes <i>Marden Pasinato, Carlos Mello and Geraldo Zimbrão</i>	
	Entity-Centric Stream Filtering and ranking: Filtering and Unfilterable Documents <i>Gebrekirstos Gebremeskel and Arjen P. de Vries</i>	
	Generating Music Playlists with Hierarchical Clustering and Q-Learning <i>James King and Vaiva Imbrasaitė</i>	
12:15 – 13:45	<i>Lunch</i>	<i>Foyer</i>
13:45 – 15:00	Sessions	
	Temporal Models and Features <i>Chair: Guillaume Cabanac</i>	<i>Room: EI 7</i>
	Long time, no tweets! Time-aware personalised hashtag suggestion <i>Morgan Harvey and Fabio Crestani</i>	
	Temporal Multinomial Mixture for Instance-oriented Evolutionary Clustering <i>Young-Min Kim, Julien Velcin, Stéphane Bonnevey and Marian-Andrei Rizoiu</i>	
	Temporal Latent Topic User Profiles for Search Personalisation <i>Thanh Vu, Alistair Willis, Son Tran and Dawei Song</i>	

	Semantic and Graph-based Models <i>Chair: Krisztian Balog</i>	Room: El 9
	Exploiting Semantic Annotations for Domain-Specific Entity Search <i>Tuukka Ruotsalo and Eero Hyvönen</i>	
	Reachability Analysis of Graph Modelled Collections <i>Serwah Sabetghadam, Mihai Lupu, Ralf Bierig and Andreas Rauber</i>	
	Main Core Retention on Graph-of-words for Single-Document Keyword Extraction <i>Francois Rousseau and Michalis Vazirgiannis</i>	
15:00 – 15:30	Coffee break	Foyer
15:30 – 17:10	Sessions	
	Efficiency <i>Chair: Arjen de Vries</i>	Room: El 7
	Adaptive Caching of Fresh Web Search Results <i>Liudmila Ostroumova Prokhorenkova, Yury Ustinovskiy, Egor Samosvat, Damien Lefortier and Pavel Serdyukov</i>	
	Approximating Weighted Hamming Distance by Probabilistic Selection for Multiple Hash Tables <i>Chiang-Yu Tsai, Yin-Hsi Kuo and Winston H. Hsu</i>	
	Graph Regularised Hashing <i>Sean Moran and Victor Lavrenko</i>	
	Approximate Nearest-Neighbour Search with Inverted Signature Slice Lists <i>Timothy Chappell, Guido Zuccon and Shlomo Geva</i>	
	User Behaviour <i>Chair: David Elsweiler</i>	Room: El 9
	User simulations for interactive search: evaluating personalized query suggestion <i>Suzan Verberne, Maya Sappelli, Kalervo Järvelin and Wessel Kraaij</i>	
	The Impact of Query Interface Design on Stress, Workload and Performance <i>Ashlee Edwards, Diane Kelly and Leif Azzopardi</i>	
	Detecting Spam URLs in Social Media via Behavioral Analysis <i>Cheng Cao and James Caverlee</i>	
	Predicting Re-finding Activity and Difficulty <i>Sargol Sadeghi, Roi Blanco, Peter Mika, David Vallet, Falk Scholer and Mark Sanderson</i>	
18:30 – 22:30	Conference Dinner at <i>Palais Niederösterreich</i>	

Wednesday, April 1

08:00	Registration/Help desk opens	Foyer
09:15 – 10:30	Sessions	
	Sentiment and Opinion <i>Chair: Guido Zuccon</i>	Room: EI 7
	Beyond Sentiment Analysis: Mining Defects and Improvements from Customer Feedback <i>Samaneh Moghaddam</i>	
	Measuring User Influence, Susceptibility and Cynicalness in Sentiment Diffusion <i>Roy Lee and Ee-Peng Lim</i>	
	Automated Controversy Detection on the Web <i>Shiri Dori-Hacohen and James Allan</i>	
	Event Mining and Summarization <i>Chair: Mark Sanderson</i>	Room: EI 9
	Retrieving Time from Scanned Books <i>John Foley and James Allan</i>	
	A Noise-Filtering Approach for Spatio-Temporal Event Detection in Social Media <i>Yuan Liang, James Caverlee and Cheng Cao</i>	
	Timeline Summarization from Relevant Headlines <i>Giang Tran, Mohammad Alrifai and Eelco Herder</i>	
10:30 – 11:00	Coffee break	Foyer
11:00 – 12:15	Sessions	
	Social Media <i>Chair: Jussi Karlgren</i>	Room: EI 7
	Towards Deep Semantic Analysis of Hashtags <i>Piyush Bansal, Romil Bansal and Vasudeva Varma</i>	
	Chalk and Cheese in Twitter: Discriminating Personal and Organization Accounts <i>Richard Jayadi Oentaryo, Jia-Wei Low and Ee-Peng Lim</i>	
	Handling Topic Drift for Topic Tracking in Microblogs <i>Yue Fei, Yihong Hong and Jianwu Yang</i>	
	Specific Search Tasks <i>Chair: Udo Kruschwitz</i>	Room: EI 9
	A Corpus of Realistic Known-Item Topics With Associated Web Pages in the ClueWeb09 <i>Matthias Hagen, Daniel Wagner and Benno Stein</i>	

Designing States, Actions, and Rewards for Using POMDP in Session Search

Jiyun Luo, Sicong Zhang, Xuchu Dong and Hui Yang

Retrieving Medical Literature for Clinical Decision Support

Luca Soldaini, Arman Cohan, Andrew Yates, Nazli Goharian and Ophir Frieder

12:15 –

Lunch

Foyer

13:45

13:45 – Session – Aggregated Search and Diversity

15:00 *Chair: Pavel Serdyukov*

Room: E1 7

Towards Query Level Resource Weighting For Diversified Query Expansion

Arbi Bouchoucha, Xiaohua Liu and Jian-Yun Nie

Exploring Composite Retrieval from the Users' Perspective

Horatiu Bota, Ke Zhou and Joemon Jose

Improving Aggregated Search Coherence

Jaime Arguello

15:00 –

Coffee break

Foyer

15:30

Closing Keynote: Stefan Thurner

15:30 – “What to Do If You Know Everything? Studying Human Behavior in a Virtual
16:45 World”

Chair: Allan Hanbury

Room: E1 7

16:45 –

Closing

17:00 *by the General Chairs*

Room: E1 7

Industry Day

Thursday, April 2

08:00	Registration/Help desk opens	Foyer
09:00 – 09:30	Welcome <i>by Jussi Karlgren</i>	Room: EI 9
09:30 – 10:30	Keynote: William Stevens (Europe Unlimited)	Room: EI 9
10:30 – 11:00	Coffee break	Foyer
11:00 – 12:30	Discussion Panel: The Idea Reactor	Room: EI 9
12:30 – 13:30	Lunch	Foyer
13:30 – 16:30	Startup & Technology Talks	Room: EI 9
	Catalyst – focus on an existing real world problem <i>Jeremy Pickens, Catalyst, Denver</i>	
	Signal: The journey so far... <i>Miguel Martinez, Signal, London</i>	
	Thomson Reuters: Challenges and Evolution of an Information Company over time <i>Vassilis Plachouras, Thomson Reuters, London</i>	
	Seznam.cz – the story of a successful web search engine <i>Jiří Materna, Seznam, Prague</i>	
	From Last.fm to Lumi – Helping people find great content based on implicit userdata <i>Martin Stiksel, Lumi, London</i>	
	Task selection based on topic induction from an IR perspective <i>João Graça, Unbabel, Lisbon</i>	
	Spinque: a story of adaptation <i>Arjen P. de Vries, Spinque, Utrecht</i>	
15:00 – 15:30	Coffee break	Foyer
16:30 – 17:15	Summing up, final comments, and closing	Room: EI 9

Map



ECR 2015 Conference Venues
 Vienna University of Technology
 Gußhausstraße 27-29
 Favoritenstraße 9-11

U Metro station **U1** Metro line

Tram station **62** Tram line

Grocery (7.30 am - 7.30 pm)

BILLA „BILLA“, Wiedner Hauptstraße 31

SPAR „SPAR“, Gußhausstraße 21

Tobacco Store (8 am - 6.30 pm)
 Karlsplatz/Opernpassage

Drug store (8 am - 6 pm)

- „Schutzengel-Apotheke“, Favoritenstraße 9-11
- „Pharmadropa“, Favoritenstraße 14
- „Apotheke Zur heiligen Dreifaltigkeit“, Wiedner Hauptstraße 14

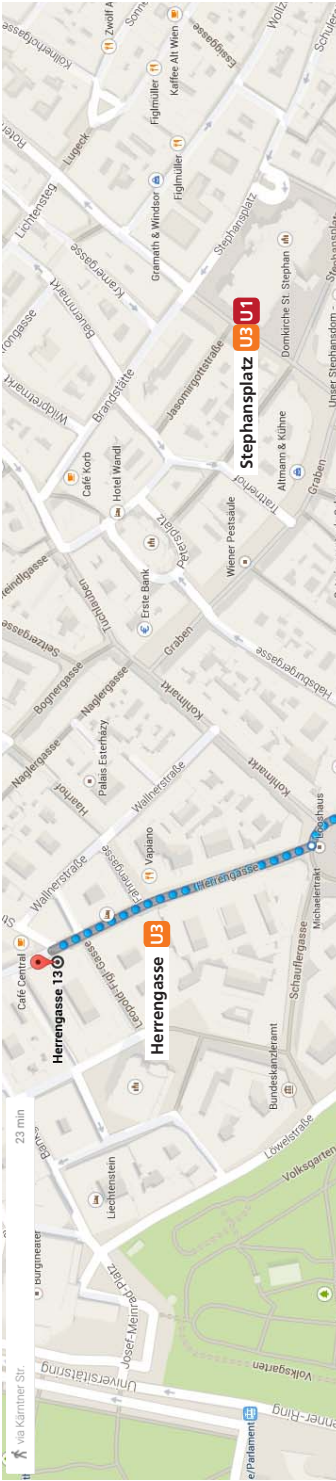
Taxi **Taxi rank**
 • Gußhausstraße/Schwarzenbergplatz

Cash Dispenser

- „Erste Bank“, Wiedner Hauptstraße 20
- in the grocery „SPAR“, Gußhausstraße 21

Family practitioner

- Dr. Herwig Laske, Favoritenstraße 14/11 | Surgery: Mon 11 am – 3 pm | Tue 1 – 6 pm | Wed 8 am – noon | Thu 3 – 7 pm | Fri 1 – 4 pm
- Dr. Andrea Hofmann-Pantlitschko, Waagasse 4/1/3 | Surgery: Mon 2 – 5 pm | Tue 4 – 7 pm | Wed 9 am – noon | Thu 4 – 7 pm | Fri 9 am – noon



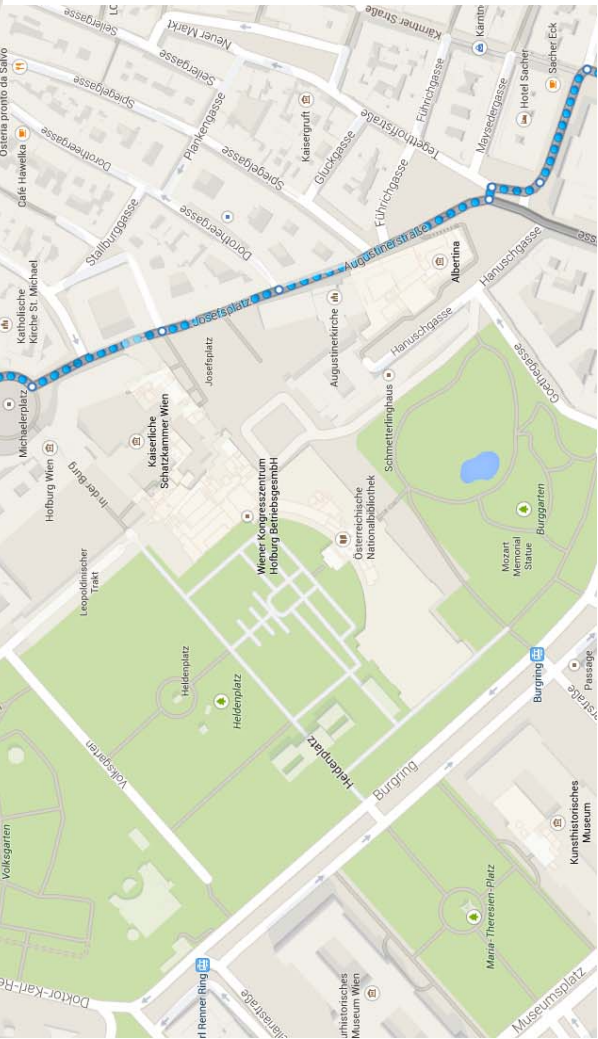
Conference Dinner

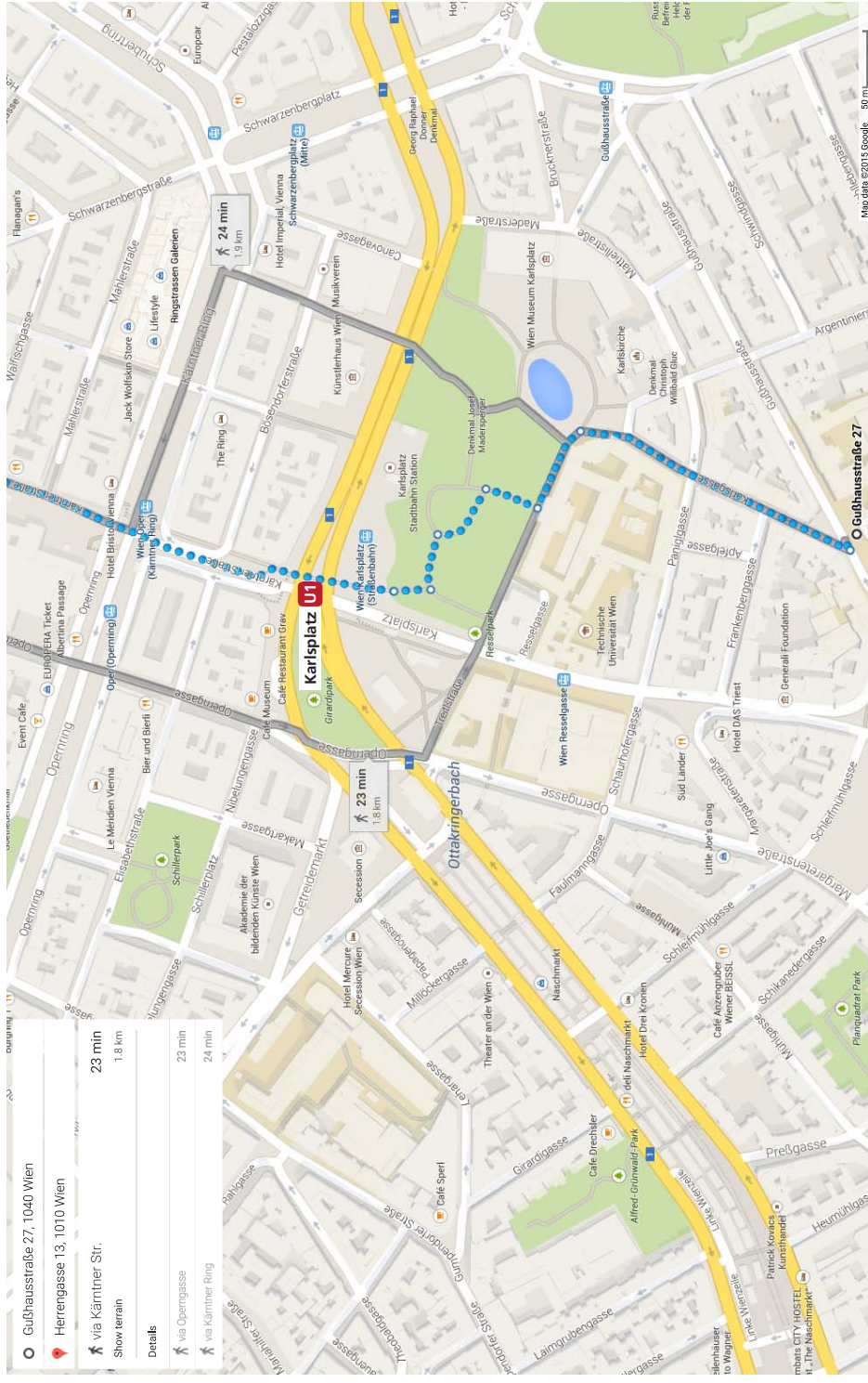
Tuesday, March 31
Beginning: 18:30

Palais Niederösterreich
Herrngasse 13
1010 Vienna, Austria

The venue can be reached by a pleasant walk of around 30 minutes from the conference venue, as shown on the following map.

Alternatively, it can be reached from the conference venue by taking the underground U1 (direction Leopoldau) to the station Stephansplatz, and then changing to U3 (direction Ottakring) to the station Herrngasse. The position of the underground station Herrngasse is shown on the map below.





○ Gulbhausstraße 27, 1040 Wien

📍 Herrengasse 13, 1010 Wien

🚶 via Kärtner Str.

🚶 Show terrain

Details

🚶 via Operngasse

🚶 via Kärtner Ring

23 min

1.8 km

23 min

24 min

Subway system

