

5th International Conference on Cognitive Systems



CogSys 2012



February 22 - 23, 2012, TU Vienna, Austria

CogSys2012 Travel Kit

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& REGELUNGSTECHNIK



1 Some Important Facts about CogSys2012

Conference site

CogSys2012 will be held in the main building of TU Vienna, Karlsplatz 13, 1040 Wien (see map and travel information in section 2).

Important dates

Wednesday, February 22 – Thursday, February 23, 2012	Conference
Wednesday February 22, 2012, 3.30 pm	Poster session
Wednesday February 22, 2012, 7.30 pm	Dinner
Thursday February 23, 2012, 10.30 am and 3:30 pm	Poster Session

Opening hours for the registration desk

February 22-23, 2012	9:00-18:00
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Wireless LAN Access

To use the turet WLAN, every participant will get a guest account with username and a password at the registration desk.

There will also be eduroam wireless LAN access.

2 Travel Informations

From Vienna International Airport

Map of the Airport:

<http://www.viennaairport.com/jart/prj3/va/map.jart?rel=en&get-entry=2000023>

Taxi:

Is in front of the arrival hall and costs about € 35 to € 40 from airport to TU Vienna.

Train and Subway:

Two floors below the airport arrival hall is the train (CAT – City Airport Train), which leaves every half hour to Vienna City Air Terminal at Wien Landstrasse also called Wien Mitte. Trains always at :05 and :35, last CAT at 23:35. It costs 10 € or 16€ both ways if purchased on-line: <https://ticket.oebb.at/bin/cat.pl>

At Landstrasse take subway U4 direction Hütteldorf and get off at Karlsplatz. Go out at the back of train; take the right exit “Resselpark” up to the street. You see the Building of Technical University in front of you.



Bus and Subway or Taxi:

In front of the arrival hall the bus leaves every 30 minutes to Morzinplatz/Schwedenplatz. The one-way-ticket for the bus is 7 €

From Morzinplatz/Schwedenplatz you can go to the subway station and take U4 direction Hütteldorf (see above!).

You get subway tickets at the entrance and at any tobacconist.

Alternatively, take a taxi at Schwedenplatz to Technical University

Other Useful Links:

Vienna-International Airport:

<http://www.viennaairport.com/jart/prj3/va/main.jart?rel=en&reserve-mode=active&content-id=1249344074214>

Vienna city map

<http://www.wien.gv.at/stadtplan/>

Public transport

You can find information about public transportation on the dedicated website:

<http://www.wienerlinien.at/wl/ep/home.do?tabId=0>

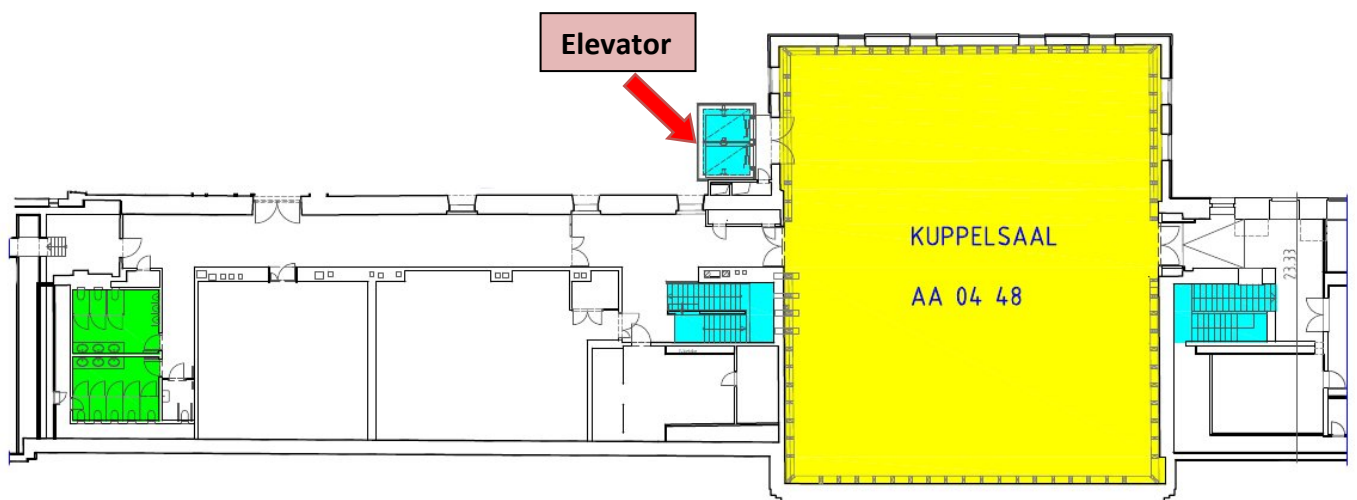
The following partial map shows the transportation network around the conference venue (TU Vienna)



3 The Conference Site

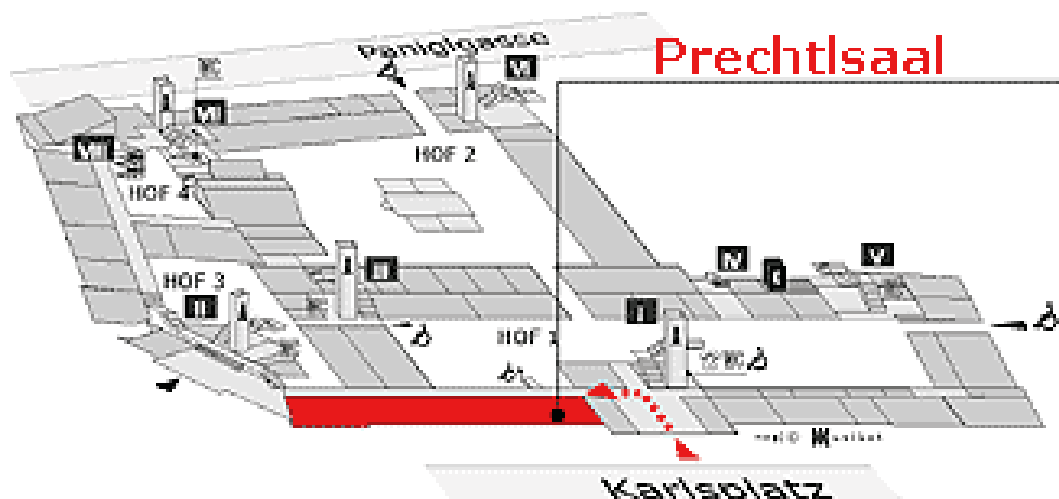
CogSys2012 will be held in the Main Building of TU Vienna, Karlsplatz 13, 1040 Wien.

The conference takes place in the **Kuppelsaal** (AA 04 48), 4th floor.



Location of Registration Desk, Poster Sessions and Coffee Breaks

Main Building, Karlsplatz 13, **Prechtlsaal**, ground floor



4 Dinner at Heurigen “Feuerwehr Wagner”

The Dinner will be held on Wednesday, February 22, 2012, 7:30 pm at Heuriger Feuerwehr Wagner, Grinzinger Straße 53, 1190 Vienna

<http://www.feuerwehrwagner.at/englisch/history.htm>

How to get there

Take subway U4 direction “Heiligenstadt” and get off at “Heiligenstadt” (final stop).

At Heiligenstadt take the bus 38A direction “Wagenwiesen” and get out at the bus stop “Neugebauerweg”. The Heuriger is about 1 minute further along the street.

You get tickets for the public transport at the entrance of any subway station and at any tobacconist or you can buy tickets online (<http://shop.wienerlinien.at/>)



5 Restaurants at the Conference Site

Close to TU is the Naschmarkt, Vienna's most popular market. There are a lot of small restaurants, which offer different types of food (e.g. Sushi, Seafood, traditional Viennese food, etc.)



For a larger picture see here: <http://g.co/maps/bm2bs>

- Head northwest on **Karlsplatz** toward **Resslgasse**
- Turn left onto **Resselgasse**
- Continue onto **Bärenmühldurchgang**
- Cross **Rechte Wienzeile**
- You are on the market. Turning left there are two aisles of stalls, one more with shops, the second on the right when towards B is full of small restaurants

For more information about Naschmarkt see her:
<http://www.wien.info/en/shopping-wining-dining/markets/naschmarkt>

More restaurants near TU Vienna:

e.g.:



Nr.	Name	Cooking	Price category
1	Asia Pavillion, Favoritenstraße 1	Asian cooking	regular
2	Aqua, Favoritenstraße 4-6	Asian cooking	regular
3	Wieden Bräu, Waaggasse 5	Viennese cooking	regular
4	Nelson's Paniglgasse 14	Viennese cooking	regular
5	Resslpark Café Restaurant, Wiedner Hauptstraße 1	Viennese cooking	regular
6	Gastwirtschaft Rohrböck, Rilkeplatz 7	Viennese cooking	regular
7	Arthur & Arthur, Gußhausstraße 20	International cooking	expensive

For an excessive list of places to eat and drink see here:

<http://www.tourist-net.co.at/lokale/index/wien4.htm>

6 Guidelines and Equipment for Presentations

Kuppelsaal is equipped with large beamer and microphone. The audience will be provided with microphones to ask questions.

Prechtsaal will provide walls to hang the posters. Posters will be numbered. Numbers will be given in the book of posters distributed at registration and will be posted in Prechtsaal.

7 Other Useful Information

Climate

The Climate in Vienna is usually pretty cold in February, it may be sunny but it may also rain or snow. You should expect temperatures between -5°C and +5°C.

Check the Austrian weather forecast here: <http://www.weathercity.com/at/vienna/>

Sightseeing in Vienna

There is much to see: From Gothic St. Stephen's Cathedral to the Imperial Palace to the Art Nouveau splendor of the Secession, from the magnificent baroque palace Schönbrunn to the Museum of Fine Arts to modern architecture at the MuseumsQuartier.

- **Schönbrunn Palace** - This baroque complex contains an enchanting park, the Palm House, the Gloriette and a zoo.
- **Schönbrunn Zoo** - The Vienna Zoo at Schönbrunn is the oldest existing zoo in the world and was voted Europe's best zoo in 2009 and 2010
- **Museum of Fine Arts** - With its vast array of eminent works and the largest Bruegel collection in the world, it is considered one of the most eminent museums in the world.
- **Naschmarkt** - The Naschmarkt is Vienna's most popular market. Located at the Wienzeile over the Wien River it is about 1,5 kilometers long.
- **St. Stephen's Cathedral** - (German: *Stephansdom*) is the mother church of the Archdiocese of Vienna and the seat of the Archbishop of Vienna, Christoph Cardinal Schönborn, OP
- **Kärntner Straße** (German for Carinthia street) is the most famous shopping street in central Vienna. It runs from the Stephansplatz out to the Vienna State Opera at Karlsplatz on the Ringstraße.

8 Technical Program of CogSys2012

CogSys 2012, 5th International Conference on Cognitive Systems

February 22 – 23, 2012, TU Vienna, Austria
<http://cogsys2012.acin.tuwien.ac.at/>

Wednesday, February 22, 2012

9:00 Registration

9:30 **Opening**, Markus Vincze, Brigitte Krenn, Vizerektor Paul Jankowitsch

9:40 **Opening statement of the European Commission, Libor Kral**
 “EU-funded research in Cognitive Systems and Robotics: From FP7 towards Horizon 2020”

10:00 **Keynote Talk 1**
 Chair: Brigitte Krenn

Stacy Marsella *“In our own likeness: Modeling human behaviour in virtual humans”*

10:50 Session 1 Robot skills

AMARSI	Adaptive Modular Architectures for Rich Motor Skills <i>Jochen Steil</i>
eSMCs	Extending Sensorimotor Contingencies to Cognition <i>Andreas K. Engel</i>
CompLACS	Composing Learning for Artificial Cognitive Systems <i>John Shawe-Taylor</i>
NeuralDynamics	A neuro-dynamic framework for cognitive robotics: scene representations, behavioural sequences, and learning <i>Georg Schöner</i>

12:10 Lunch

14:00 **Keynote Talk 2**
 Chair: Michael Zillich

Richard Cooper *“Towards a General Architecture for the Integration of Reactive and Deliberative Behaviour: Insights from Cognitive Neuroscience”*

14:50 Session 2 Beyond single Robots

RoboEarth	robots sharing a knowledge base for world modelling and learning of actions <i>Heico Sandee</i>
ECHORD	European Clearing House for Open Robotics Development <i>Florian Röhrbein</i>

15:30 Posters & Coffee

16:30 Session 3 Manipulation

GRASP	Emergence of cognitive grasping through emulation, introspection, and surprise <i>Danica Kragic</i>
GeRT	Generalising Robot Manipulation Tasks <i>Christoph Borst</i>
TOMSY	Topology Based Motion Synthesis for Dexterous Manipulation <i>Danica Kragic</i>
IntellAct	Intelligent observation and execution of Actions and manipulations <i>Norbert Krüger</i>
Xperience	Robots Bootstrapped through learning from Experience <i>Rüdiger Dillmann</i>

18:10 End

19:30 Dinner at Heurigen “Feuerwehrwagner”

Thursday, February 23, 2012

9:00 Keynote Talk 3:

Chair: Markus Vincze

Mary Hayhoe “Control of Attention in the Context of Behavior”

9:50 Session 4 Language and Robots

POETICON & POETICON++	The Poetics of Everyday Life: Grounding Resources and Mechanisms for Artificial Agents <i>Katerina Pastra</i>
NIFTi	Natural human-robot cooperation in dynamic environments <i>Geert-Jan M. Kruijff</i>

10:30 Posters & Coffee

11:30 Session 5 Language and Robots, cont.

ALIZ-E	Adaptive Strategies for Sustainable Long-Term Social Interaction <i>Tony Belpaeme</i>
SAPHARI	Safe and Autonomous Physical Human-Aware Robot Interaction <i>Alessandro De Luca</i>
RADHAR	Robotic Adaptation to Humans Adapting to Robots <i>Joris De Schutter</i>
HUMOUR	HUMAN behavioral Modeling for enhancing learning by Optimizing hUMAN-Robot interaction <i>Vittorio Sanguinetti</i>

12:40 Lunch

14:00 Keynote Talk 4:
Chair: Markus Vincze

Minoru Asada “Cognitive Developmental Robotics as Embodied Cognitive Systems”

14:50 Session 6 Swarms

Goal-Leaders	Goal-directed, Adaptive Builder Robots <i>Giovanni Pezzulo</i>
CoCoRo	Collective Cognitive Robots <i>Thomas Schmickl</i>

15:30 Posters & Coffee

16:20 Session 7 Applications

V-CHARGE	V-Charge - Autonomous Valet Parking and Charging for e-Mobility <i>Paul Furgale</i>
EuroSurge	Coordination Action - European Robotic Surgery <i>Paolo Fiorini</i>

17:00 End CogSys 2012

17:00 euCogIII Primer

18:00 End

18:30 Social Event – Traditional Austrian Punsch, Ice Skating and Austrian/Bavarian Curling (ice skating on one’s own responsibility)

20:30 Dinner at “Salmbräu”

9 Poster Session

Wednesday, February 22, 2012 3.30 pm and Thursday, February 23, 2012, 10.30 am and 3.30 pm at Prechtlsaal (ground floor).

The posters will be displayed during the whole duration of the conference.
Please take off the posters no later 18:00 on Thursday.

10 The EUCogIII Meeting

23-24 February 2012 - First EUCogIII Members Conference, Vienna

"Do Robots Need Cognition? - Does Cognition need Robots?"

Organizers:

- **Markus Vincze** (TU Vienna),
- **Vincent C. Müller** (ACT/Anatolia & Oxford)

Thursday February 23, 2012 CogSys, EUCogIII from 17:00

Friday February 24, 2012 EUCogIII (ca. 9:30-18:00)

The meeting is held in connection with **CogSys 2012**.

Location:

same venue as CogSys, see respective sections.

Keynote speakers:

- **Michael Arbib** (USC, LA),
- **Michael Beetz** (TU Munich),
- **Libor Kral** (EU Commission),
- **Matthias Scheutz** (Tufts, Boston).

Concept

This EUCog network meeting investigates the link between robotics, in all its forms, and cognitive systems research. These two areas are now closely intertwined, so we must explain the potential and name the problems of this connection.

An initial explanation: A cognitive system acts in flexible ways to achieve its goals (thus involving adaptation and learning). Greater cognitive ability will often be achieved by cooperation with other agents and use of traditional ‘higher’ functions like anticipation and reasoning. The tradition of artificial ‘cognitive’ systems stems from a rejection of the purely technical and intellectual orientation of classical ‘Artificial Intelligence’ and from a focus on whole autonomous systems that interact with a real environment. This tradition thus involves both the study of natural cognitive systems and the making of embodied autonomous technical systems (e.g. robots). Technical cognitive systems are motivated by the view that traditional systems with top-down control and full pre-specification (typically in sense-process-act loops) are less robust and more limited than autonomous and flexible systems.
[VC Müller]

Registration:

Deadline for registration, First EUCogIII Members Conference, Vienna, Fri. February 17, 2012, 23:59

Link to the EUCogIII registration form:

<http://www.eucognition.org/index.php?page=event-reg-eucogiii-first-conf>

Programme:

Thursday, February 23, 2012

17:00 – 18:00 Libor Kral (EU Commission)
(Chair: Vincent C.Müller)

18:30 – 20:00 CogSys & EUCog Evening – Traditional Austrian Punsch, Ice Skating and Bavarian curling
(ice skating on one's own responsibility)

20:30 Dinner at "Salmbräu"

Friday, February 24, 2012

9:30 – 10:30 Matthias Scheutz (Tufts, Boston)
(Chair: Tom Ziemke)

10:30 – 11:00 Open discussion

11:00 – 11:30 Coffee break

11:30 – 12:30 Michael Beetz (TU Munich)
(Chair: Rolf Pfeifer)

12:30 – 13:00 Open discussion

13:00 – 14:00 Lunch

14:00 – 15:30 Workshops

- A) Scheutz – respondent Roger K. Moore (Sheffield U)
Kuppelsaal (Chair: Gregor Schöner)
- B) Beetz – respondent Verena Hafner (HU Berlin)
HS 14A Günther Feuerstein Hörsall, 3rd Floor
(Chair: Tjeerd Andringa)

15:30 – 16:00 Coffee break

16:00 – 16:15 EUCog Wiki Presentation, Alberto Motebelli

16:15-17:45 Michael Arbib (USC, LA)
(Chair: Andreas K. Engel)

Social Event – Traditional Austrian Punsch, Bavarian curling, Ice Skating and Dinner

EUCogIII social event will take place on Thursday evening, February 23, 2012.

Starting 18:30 we will meet at the “Wiener Eislaufverein”, Lothringerstraße 22, 1030 Wien.

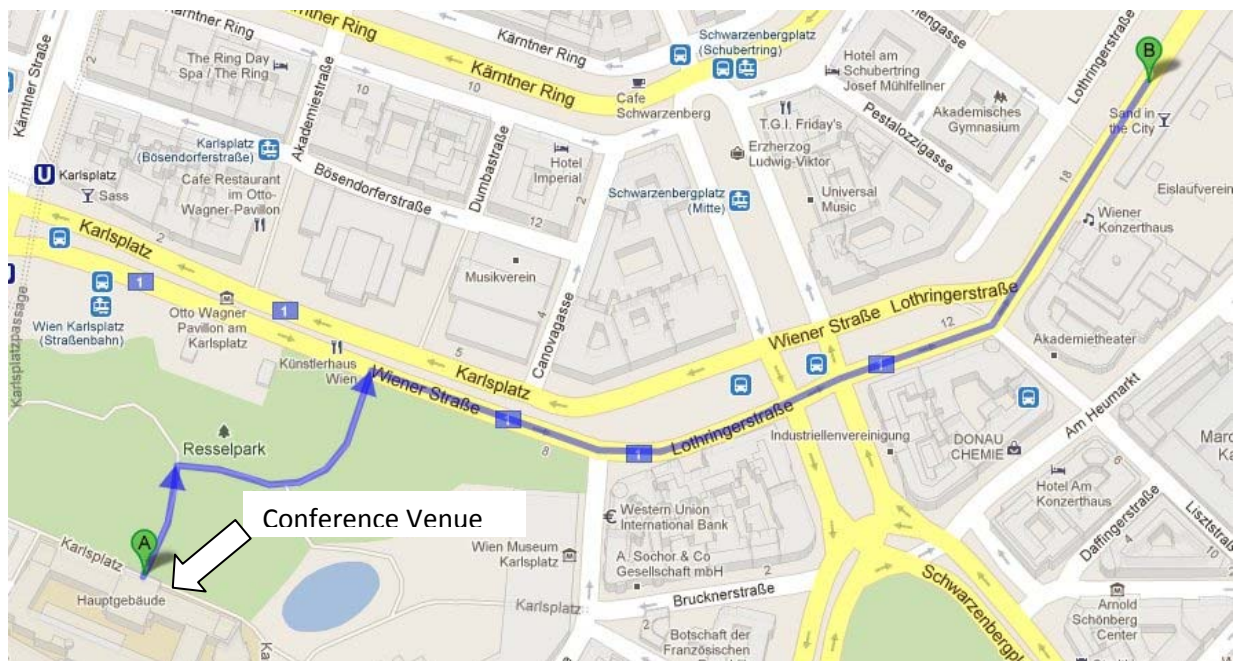
At this outdoor location, we will have traditional Austrian punch, hot soup as a starter and team up for Bavarian (Austrian) curling.

For those of us who are looking for more adventure, there is also the possibility for ice skating (skates will be provided on site).

At 20:30 we will meet at “Salmbräu”, Rennweg 8, 1030 Wien for dinner.

How to get there

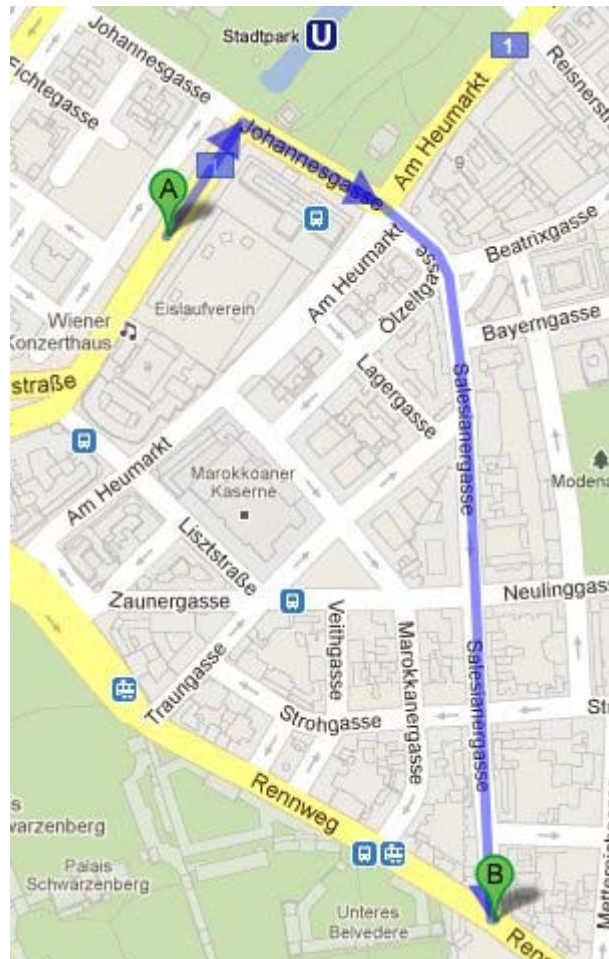
The “Wiener Eislaufverein”, Lothringerstraße 22, 1030 Wien (<http://www.wev.or.at/>) is accessible on foot in about 10 minutes from the conference venue.



For a larger picture see here: <http://g.co/maps/j7esp>

- Head east on Karlsplatz towards Lothringerstraße
- Cross Schwarzenbergplatz and continue along Konzerthaus
- Eislaufverein will be on your right

“Salmbräu”, Rennweg 8, 1030 Wien
(<http://www.salmbraeu.com/index.php?id=2&L=1>) is accessible on foot in about 10 minutes from the Wiener Eislaufverein.



For a larger picture see here: <http://q.co/maps/ffyht>

- Head northeast on Lothringerstraße toward Johannesgasse
- Turn right onto Johannesgasse
- Continue onto Salesianergasse
- Turn left onto Rennweg and cross street
Destination will be on the right