SenSys 2010

ETH
Eidgenössische Technische Hochschule Zürich
Swiss Federal Institute of Technology Zurich

acm Association for
Computing Machinery

ETH Zurich, Main Building

Welcome to Zurich: Grüezi

Welcome to beautiful Zurich, the largest city in Switzerland. On the northern end of the Swiss Alps, Zurich is a scenic center of commerce and research. The SenSys conference is held at the Main Building of ETH Zurich, which is located in the heart of the city. You will have beautiful views of the lake and the surrounding mountains right from the ETH Main Building.

We are very happy to have you as our guest. This brochure will help you find your way around and answers most of the questions that typically come up at a conference. Feel free to contact us for any questions and concerns.

Jan Beutel, General Chair, SenSys 2010

Public Transport, Airport and Hotels

Zurich airport (ZRH)

Zurich airport is located to the north of Zurich and easily accessible via public transportation. More information can be found at http://www.zurich-airport.com/.

Public transport - Tickets and fares

The city of Zurich is divided into fare zones. Depending on where you travel to, you need to pay a different amount depending on the number of zones you are passing. Most of Zurich is within zone 10. Special (outside) locations such as the airport require a 3-zone ticket. Train tickets must be purchased **before** boarding. There are automatic ticket machines (see http://www.zvv.ch/en/tickets/automatic-ticket-machine/index.html), but they often only accept coins. **Tickets can be used for trains, trams and buses.** For more information see: http://www.zvv.ch/en/. We can recommend the Zurich Card: http://www.zvv.ch/en/tickets/tickets-and-prices/zuerich-card.html.

From the airport to To Main Station ("Zürich HB")

If you travel from the airport to the city centre (Main Station, in german: "Zürich HB"), you should travel by S-Bahn or train. The trains leave from the station "Zürich Flughafen". The train station in the airport is on the lower floor. You may take any train heading to "Zürich HB" (Main Station). Journey time: about 10 minutes

From the airport to ETH - Tram station in front of the airport building (to ETH)
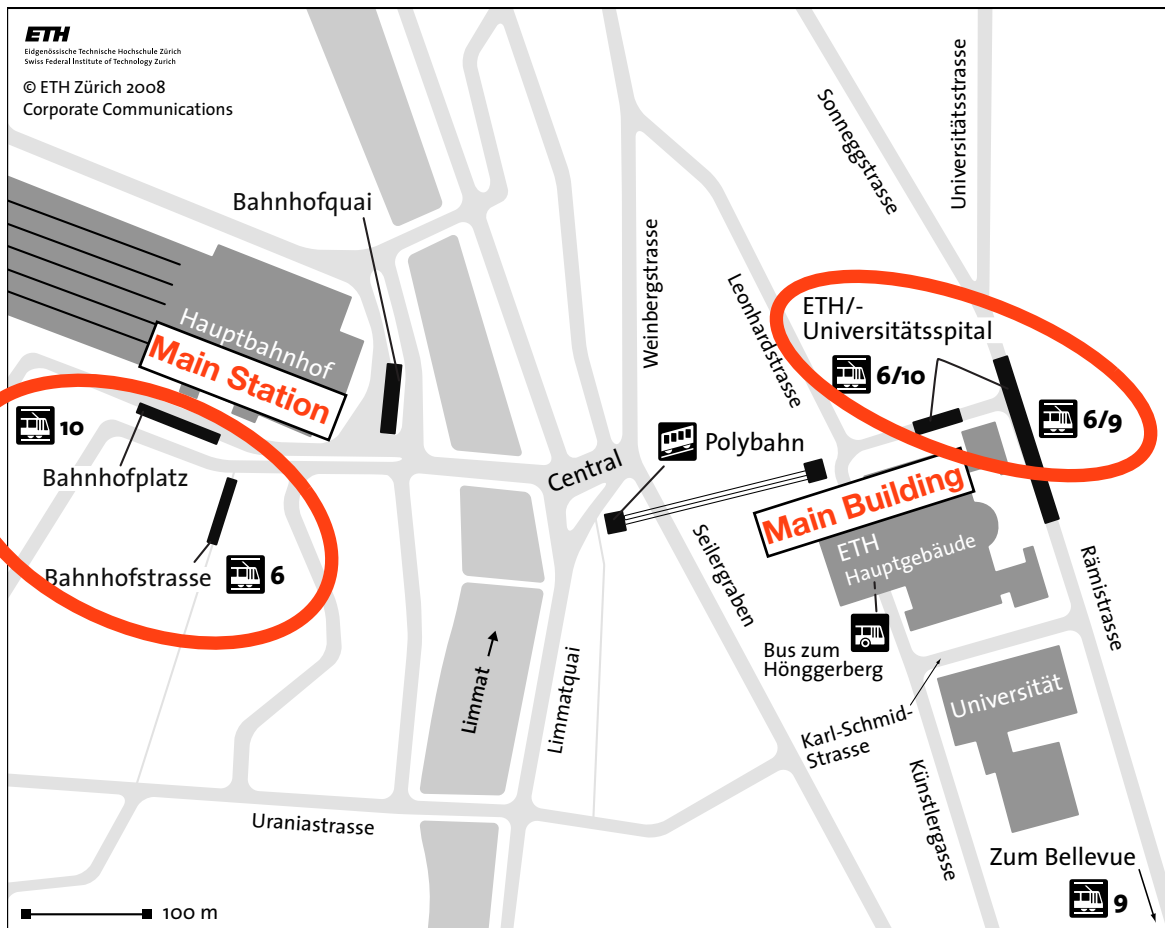
Tram no. 10 (direction "Bahnhofplatz/HB") to stop "ETH/Universitätsspital". Buying tickets directly at the stop requires coins. If you want to buy a ticket with credit/debit card, go to the train station on the lower floor. The tram operates daily from 6 a.m to 11 p.m. with trams departing every 7 to 15 minutes. Journey time: 30 minutes

From and to the hotels

Note that the conference hotels are in walking distance of Main Station (Hotel Alexander Guesthouse, Hotel Limmathof) or close to ETH (Hotel Comfort Inn Royal, Hotel Sunnehus). For Hotel St. Georges, you transfer first to the Main Station and continue by tram. For Hotel ibis Zürich City-West, you can take the S16 in the direction of "Zürich HB" and exit at station Hardbrücke. From there, it's a short walk.

Getting to the Conference Site

The nearest tram stop to ETH Main Building is "ETH / Universitätsspital", which is serviced by Trams no. 6,9 and 10.

Directions to Conference Site: ETH Main Building (Hauptgebäude) from Main Station

From tram stop "Bahnhofstrasse/HB":

Tram no. 6 (direction Zoo) to tram stop "ETH/Universitätsspital".
Journey time: about 6 minutes

From tram stop "Bahnhofplatz/HB":

Tram no. 10 (direction Flughafen or Bahnhof Oerlikon) to tram stop "ETH/Universitätsspital"
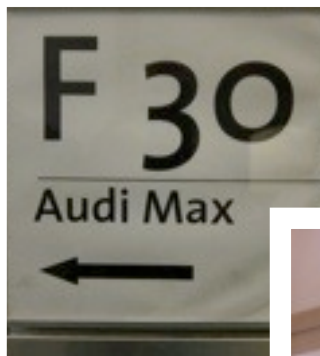Journey time: about 8 minutes

From tram stop "Central":
Polybahn (departing every 3 minutes) to the Polyterrasse.
You need a valid ticket for zone no. 10 ("Stadt Zürich").
Walking takes approx. 10-15 minutes.

Inside the Main Building (HG)

View onto the Audimax and the entrance hall with the fountain. (nnstoimenov, flickr)

The Audimax is entered on the F-Floor. The room number of the Audimax is F 30. In front of the Audimax is the registration desk.

Building/Room Codes

SenSys is located in the Main Building (abbrv. HG). Each room denotes a floor and a room number. So the **Audimax**, where we have all talks, is denoted as **HG F30**: It's room 30 on floor F in building HG.

Talks

All talks are located in the Audimax, which is **HG F30.**

Registration desk

The registration desk is in front of the Audimax. Support at the registration desk is present approximately from 8am till 4pm every day (except Friday).

Lunch/coffee breaks

Lunch/coffee break buffets are on the same floor as Audimax, yet across the hall in the so-called 'Uhrenhalle' (Clock Hall).

Audimax rules

Eating and drinking is not allowed inside the Audimax. Use the halls; there's plenty of space.

Speakers

There is a fixed laptop you can use for your presentation (Windows7, Office 2010, Adobe Acrobat Reader). Please make sure that your presentation works as expected before your session. Coordinate with your session chair early.

Posters and Demos (HG)

View onto the ground floor hall. This is where demos and posters are located.(nnstoimenov, flickr)

Part of the demos are in the Foyer Eo-Süd (Sign:"Südhof Auditorien") located in the southern wing of the building between floor E and floor F.
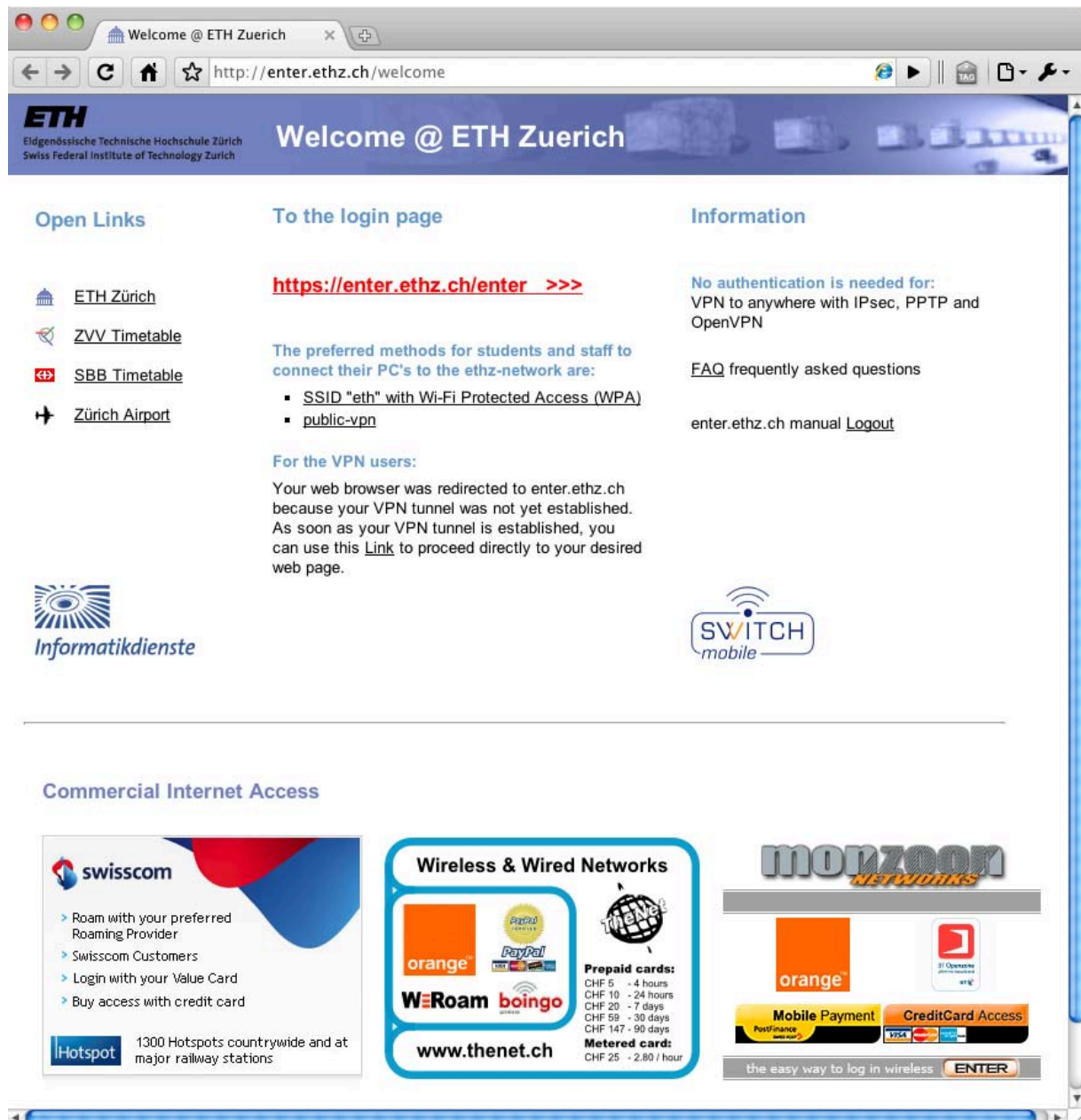
Posters and Demo Session

Posters and Demos are presented on Thursdays from 3:30pm till 7pm. There are food and drinks to be enjoyed will exploring the demo and poster presentations. One part of the event is in the main hall on the ground floor. Another part for the demos is in the Eo Foyer Süd (South, German: "Süd" - Sign:"Südhof Auditorien"). This is the southern hall in between floor E and floor F.

Posters and Demo Session Setup

Posters and Demos can be set up on Thursday starting from 12:30pm. The poster/demo organizer will assist with the setup. There is a limited amount of screens available for demos that can be reserved through the demo chairs. Screens can be picked up at the demo location. You have to deposit an ID when picking up the monitor. You will be responsible for the monitor during the demo session. You get get the ID back after drop-off.

WiFi @ ETH: public

WiFi via **public** network

You can use the ETHZ **public** WiFi network. You are automatically (re-)directed to the landing page: https://enter.ethz.ch. The **public** network is available in all ETH buildings. There is one username and password for everybody. Note that we cannot post this username and password online. Hence, you will find the password in the printed brochure in your registration package.

Please note that the **public** network is open for VPN to anywhere with IPsec, PPTP and OpenVPN.

Friday Nov 5, 2010

Registration
Session 7
Coffee Break
Session 8
Closing

Enjoy the rest of the afternoon by experiencing Zurich. There are plenty of activities in Zurich you can select from. Our partners from Zurich tourism provide an overview at: http://www.zuerich.com

Thursday Nov 4, 2010

Registration
Session 4
Coffee Break
Session 5
Lunch
Session 6
Poster & Demo Session
Refreshments

Wednesday Nov 3, 2010

Registration
Opening
Keynote
Coffee Break
Session 1
N2 Women
Lunch
Session 2
Break
Session 3
SenSys Business Meeting
Welcome Apero
Conference Banquet

Tuesday Nov 2, 2010

Registration
Workshops & Doctoral Colloquium (see separate program)

7:30
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Workshops Tue 02.11.2010

WHEN	WHAT	LOCATION
8:00 am - 6:00 pm	PhoneSense http://sensorlab.cs.dartmouth.edu/phonesense/ Andrew Campbell (Dartmouth College) Jie Liu (Microsoft Research)	Forsthaus Waldegg, Uetliberg
8:00 am - 6:00 pm	BuildSys http://buildsys.org/2010/ Antonio Ruzzelli, University College Dublin, Ireland	CABinett, CAB, Main Site
8:00 am - 6:00 pm	Doctoral colloquium http://www.vs.inf.ethz.ch/events/sensys10dc/ Kay Roemer, University of Luebeck and ETH Zurich	ETZ E81, ETZ, Main Site

Locations

Directions to the locations can be found on pages 14-16.

Technical Program Wed 03.11.2010

WHEN	WHAT	LOCATION
8:30 am - 9:00 am	Opening Remarks and Best Paper Award	Audimax, HG F30
9:00 am - 10:00 am	Keynote by Prof. Alex 'Sandy' Pentland, MIT: "Building a Nervous System for Humanity"	Audimax, HG F30
10:00 am - 10:30 am	Coffee Break	in front of Audimax
10:30 am - 11:30 am	Session 1: Link Layer Chair: Adam Wolisz • Design and Evaluation of a Versatile and Efficient Receiver-Initiated Link Layer for Low-Power Wireless • PIP: A Connection-Oriented, Multi-Hop, Multi-Channel TDMA-based MAC for High Throughput Bulk Transfer	Audimax, HG F30
11:30 am - 12:30 pm	Lunch Break	in front of Audimax
11:30 am - 12:30 pm	N^2 Women Event The N^2 Women Event is a gathering exclusively for women, giving them the opportunity to foster connections among female researchers in computer networking. Prof. Polly Huang (National Taiwan University) will give a short talk.	HG F 33.3
12:30 pm - 2:00 pm	Session 2: Mobile Sensing & Tracking Chair: Cormac Sreenan • AutoWitness: Locating and Tracking Stolen Property While Tolerating GPS and Radio Outages • SensLoc: Sensing Everyday Places and Paths using Less Energy • Adaptive GPS Duty Cycling and Radio Ranging for Energy-efficient Localization	Audimax, HG F30
2:00 pm - 2:30 pm	Break with refreshments	in front of Audimax
2:30 pm - 4:00 pm	Session 3: Participatory Sensing Chair: Kamin Whitehouse • The Jigsaw Continuous Sensing Engine for Mobile Phone Applications • Cooperative Transit Tracking using GPS-enabled Smartphones • Privacy-preserving Regression Modeling of Participatory Sensing Data	Audimax, HG F30
4:00 pm - 5:00 pm	SenSys Business Meeting	HG E 41
starting at 6:00 pm	Welcome Apero and Conference Banquet	Uto Kulm, Uetliberg

Technical Program Thu 04.11.2010
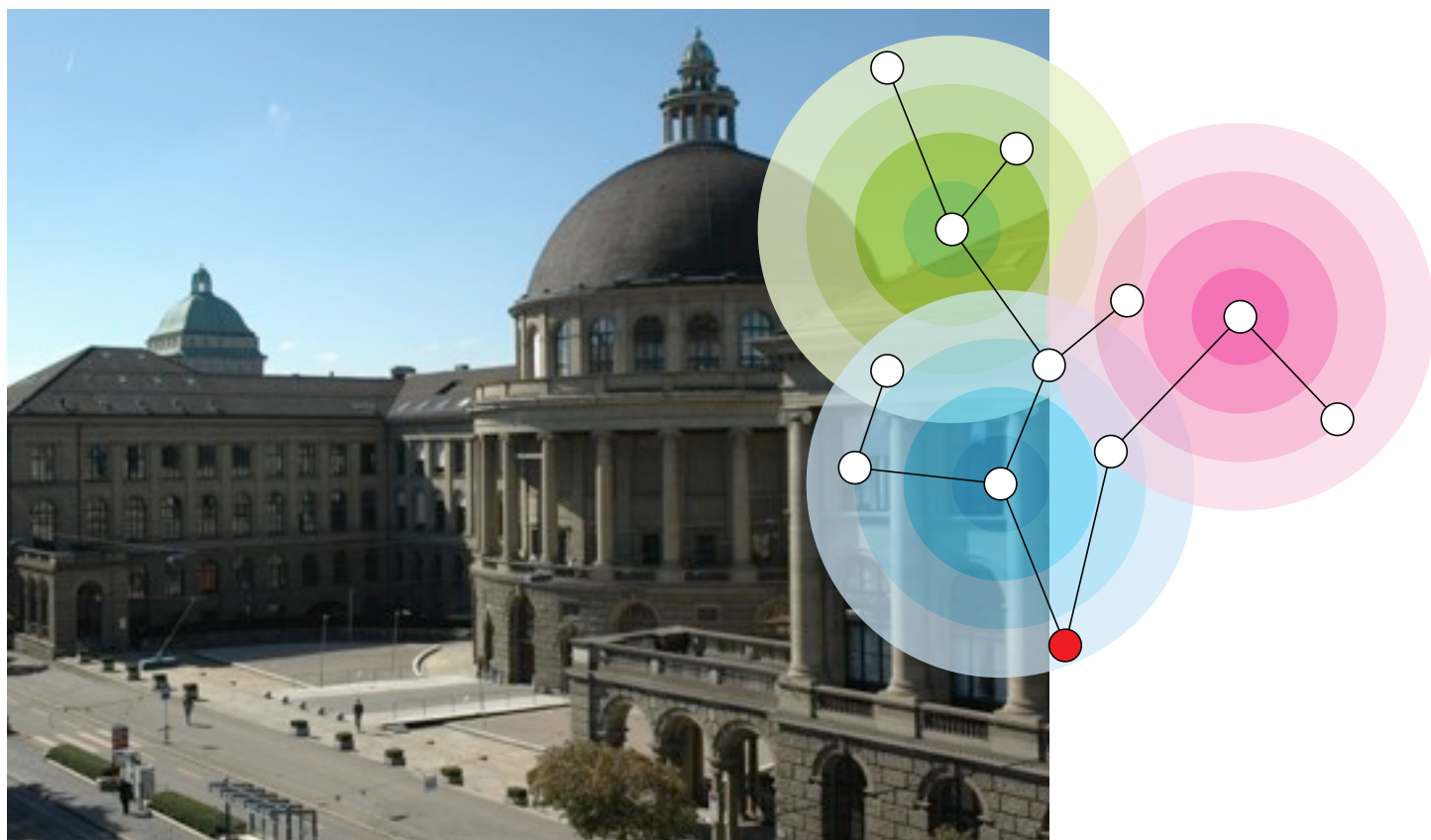
WHEN	WHAT	LOCATION
8:30 am - 10:30 am	Session 4: Applications Chair: Akos Ledeczi • PipeProbe: A Mobile Sensor Droplet for Mapping Hidden Pipeline • Evolution and Sustainability of a Wildlife Monitoring Sensor Network • Meeting Ecologists Requirements with Adaptive Data Acquisition • Reliable Clinical Monitoring using Wireless Sensor Networks: Experience in a Step-down Hospital Unit	Audimax, HG F30
10:30 am - 11:00 am	Coffee Break	in front of Audimax
11:00 am - 12:30 pm	Session 5: Systems and Web Services Chair: Koen Langendoen • Efficient Diagnostic Tracing Support for Wireless Sensor Networks • Enix: A Lightweight Dynamic Operating System for Tightly Constrained Wireless Sensor Platforms • sMAP - a Simple Measurement and Actuation Profile for Physical Information	Audimax, HG F30
12:30 pm - 1:30 pm	Lunch Break	in front of Audimax
1:30 pm - 3:30 pm	Session 6: Sensing in Cyber Physical Systems Chair: Polly Huang • The Smart Thermostat: Using Wireless Sensors to Save Energy in Homes • Estimating Building Consumption Breakdowns using ON/OFF State Sensing and Incremental Sub-Meter Deployment • eShare: A Capacitor-Driven Energy Storage and Sharing Network for Long-Term Operation • Adaptive Decentralized Control of Underwater Sensor Networks for Modeling Underwater Phenomena	Audimax, HG F30
3:30 pm - 7:00 pm	Demo and Poster Session Refreshments and snacks are served.	ETH Main Hall, Ground Floor (E-Floor) and Südhof-Auditorien (Eo-Floor South)

Technical Program Fri 05.11.2010

WHEN	WHAT	LOCATION
8:30 am - 10:00 am	Session 7: Location and TimeSync Chair: Kay Roemer • A Case Against Routing-Integrated Time Synchronization • Revealing the Hidden Lives of Underground Animals with Magneto-Inductive Tracking • Locating Sensors in the Wild: Pursuit of Ranging Quality	Audimax, HG F30
10:00 am - 10:30 am	Coffee Break	in front of Audimax
10:30 am - 12:00 pm	Session 8: Network Stack Chair: Affan Syed • Surviving Wi-Fi Interference in Low Power ZigBee Networks • Mapping the Urban Wireless Landscape with Argos • Practical 3D Geographic Routing for Wireless Sensor Networks	Audimax, HG F30
12:00 am - 12:30 pm	Closing	Audimax, HG F30

N² Women Event at Sensys 2010

Wednesday Nov 3, 2010

11:30 –12:30

HG F 33.1, Main Building, ETH Zurich
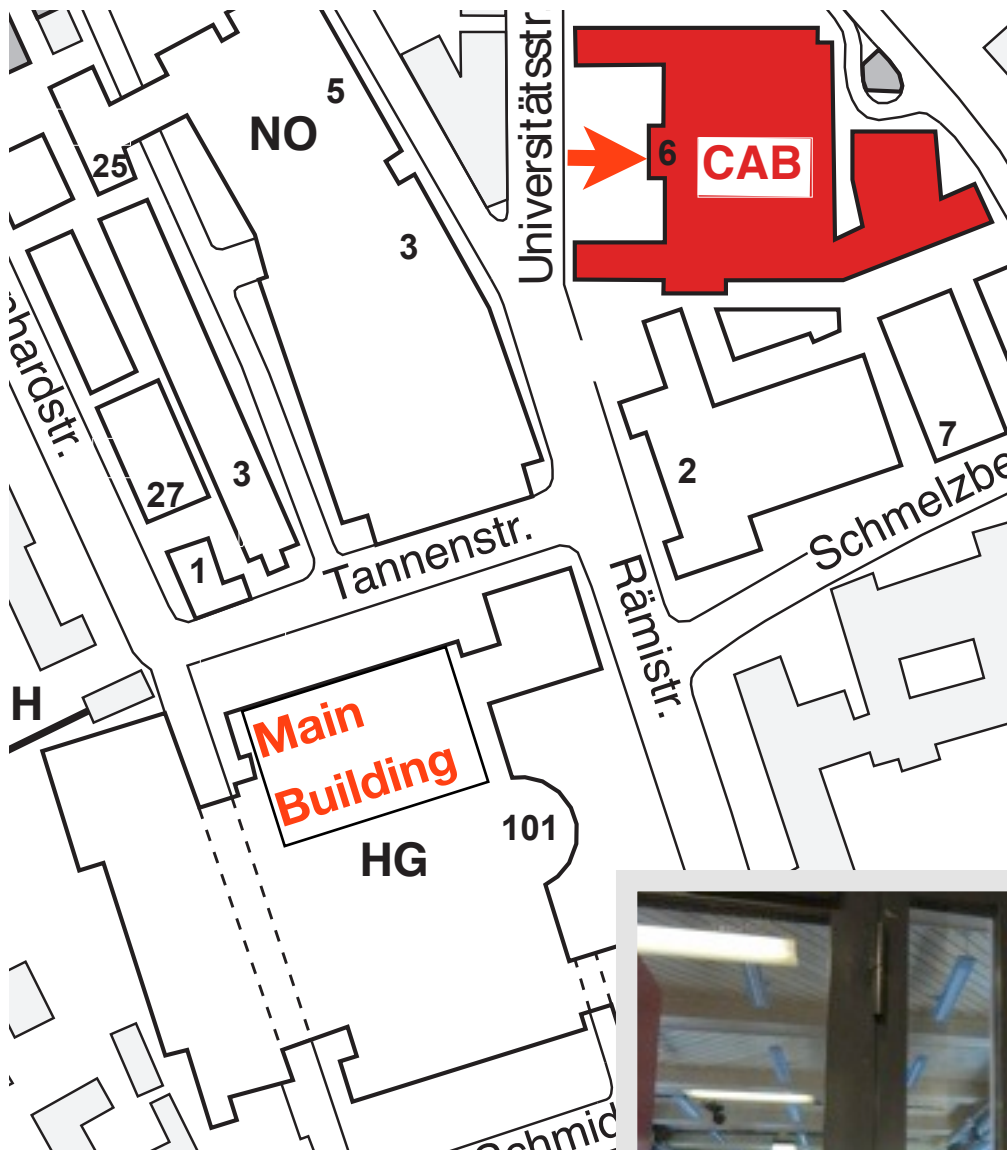
Guest speaker: Professor Polly Huang, NTU

Please join us for an informal lunch and a get-together!

Networking Networking Women (N² Women) is a discipline-specific community for researchers in the communications and networking research fields. The main goal of N² Women is to foster connections among the under-represented women in computer networking and related research fields. More information about N² Women is available at http://committees.comsoc.org/n2women/.

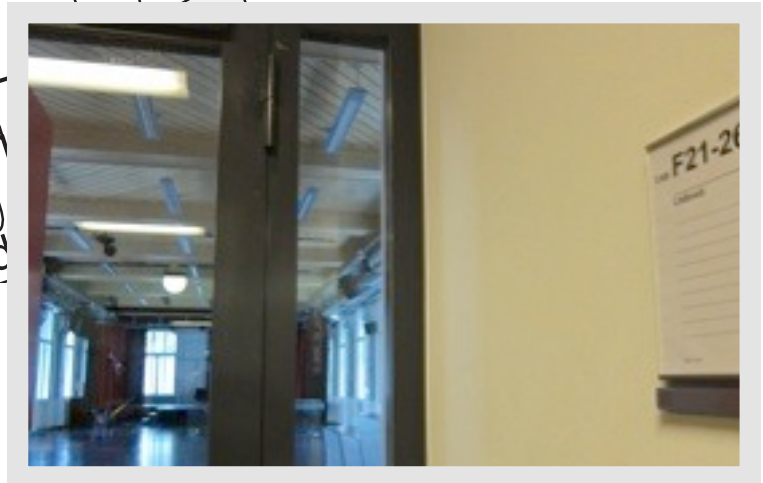**Please RSVP to Yu-Han (Tiffany) Chen, yuhan@csie.ntu.edu.tw**

N2Women is an ACM SIGMOBILE program that is supported by the IEEE Communications Society, Microsoft Research and HP Labs. We thank ACM SenSys for their support of this meeting.

BuildSys Workshop 2010

The CAB is in short walking distance from the main building. The main entrance is annotated with the arrow.

The CABinett is room F21-26 in the CAB.

CAB

BuildSys is located in the CAB building up the street from the ETH main building.

Room CABinett in CAB

BuildSys is held in the CABinett room F21-26. Just enter through the main entrance, climb the first set of stairs and take the aisle to the left.

PhoneSense Workshop 2010

Forsthaus Waldegg. Front view.

Cross the rail tracks at this sign.

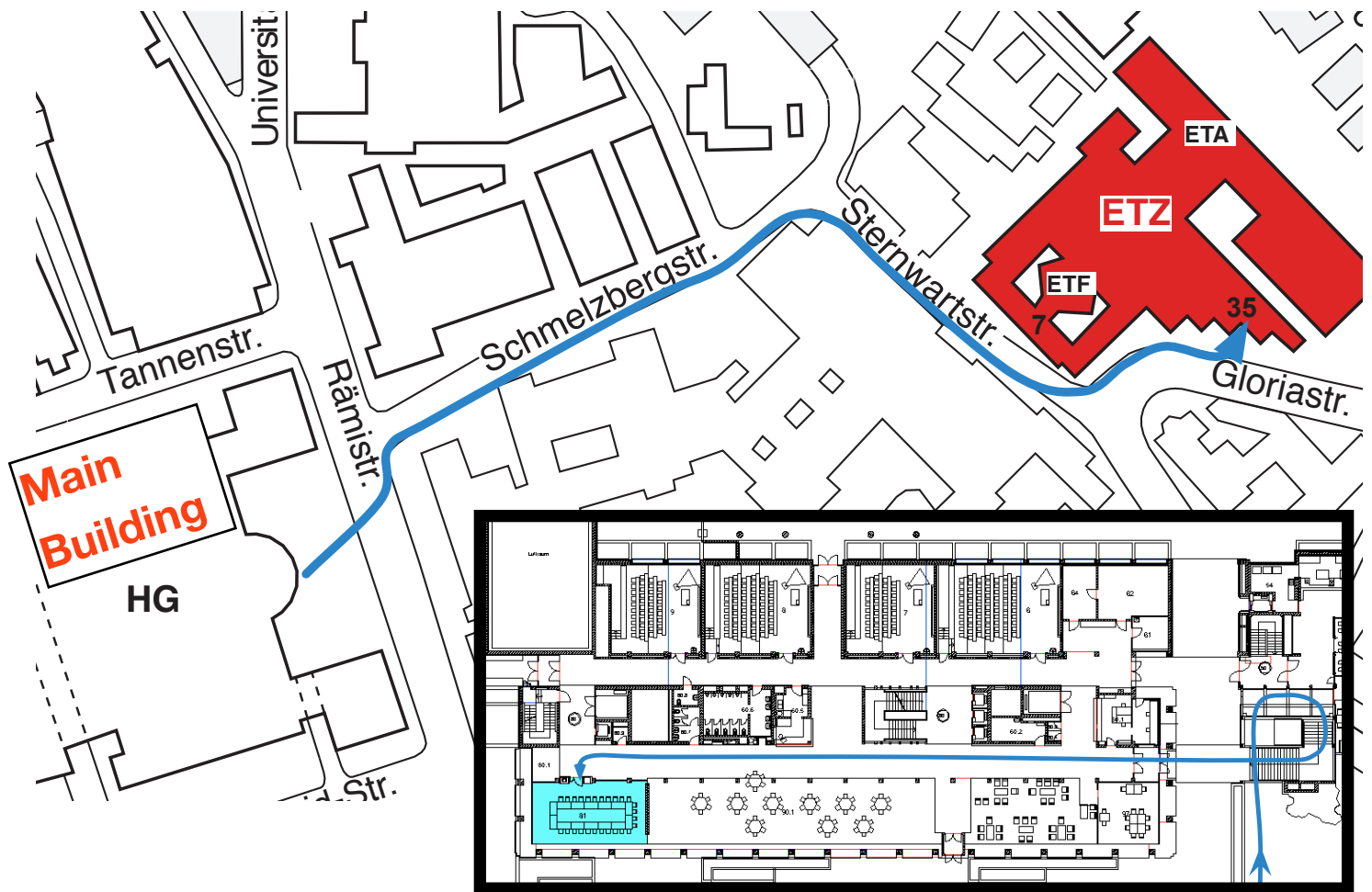**Take the S10 - Uetliberg Bahn - to get to the Forsthaus.**

Workshop rooms Waldegg

PhoneSense is located in the forester's lodge ("Forsthaus") Waldegg of ETH Zurich. There are two seminar rooms: Milan and Fuchs. Milan is used for the main event, Fuchs is used for coffee breaks and lunch.

Getting there with the S10 train - Uetliberg Bahn

The S10 is a regional railway (german: "S-Bahn"). It runs from Zurich Main Station ("Zürich HB") and heads for Uetliberg; it leaves from the (underground) tracks 1 and 2 (a map is here). These underground tracks are also referred to as "Bahnhof SZU". The train frequency is usually 30 minutes and the trip takes about 15 minutes. You need to exit the train at station "Uitikon Waldegg". There is a yellow sign indicating the "Forsthaus". You can see the Forsthaus to the left (in driving direction, i.e. uphill) of the tracks so you need to cross the tracks as seen above. You can check the schedule at http://www.zvv.ch/en/.

Doctoral Colloquium

ETZ Building

The doctoral colloquium is located in the ETZ building of the downtown campus. The entrance of the building is Gloriastrasse 35. It is a 5-minute walk from the main building ("HG"), as shown above. Other maps can be found online at the EE department at http://www.ee.ethz.ch/.

Room ETZ E 81

If you enter the ETZ building through its main doors, you are already on the E-floor. Room E 81 is in the far left corner of the building.

Conference Banquet, Wed. 03.11.2010

Restaurant UTO KULM

The dinner is located on top of Uetliberg in Zurich and features a fantastic panoramic view. It is right on the first day of the main conference.
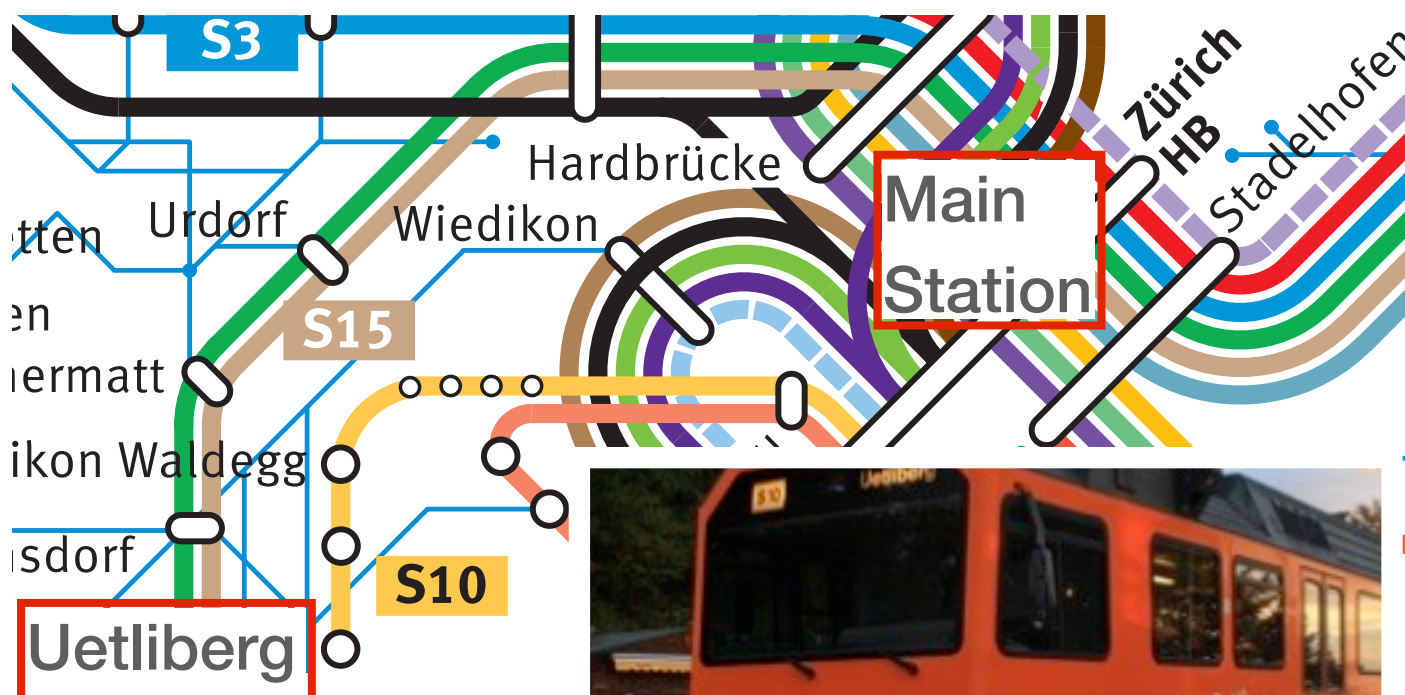
Reception starting at 6.00 pm

There are some (hot) drinks around the bonfire to enjoy the beautiful view onto Zurich, Lake Zurich and the Alps.

Dinner starting at 7.00 pm

Our three-course dinner starts at 7pm:

-Vegetarian Soup

-Choice of Beef/Veal combination or Vegetarian dish

-Dessert-Symphony

Getting to the Dinner Location

The S10 train is also called Uetliberg Bahn. (Roland zh, Wikipedia)

Uto Kulm - Uetliberg

Our dinner destination is on top of Uetliberg. From the train station Uetliberg it's a 5-10 min walk.

S10 train - Uetliberg Bahn

The S10 is a regional railway line of the S-Bahn. It runs from Zurich Main Station ("Zürich HB") and heads for Uetliberg; it leaves from the (underground) tracks 1 and 2 (a map is here), also called "Bahnhof SZU". The train frequency is usually 30 minutes and the trip takes 20 minutes. Trains around dinner time run at 17:05, 17:35, and 18:05 .

Train tickets are provided in the registration packet.

Guides and Groups

We will organize groups with a local that guides you from ETH Main Building up to Uto Kulm. The guide will walk you to the Main Station and take the train with you.

Transportation back

You can take the train back to Main station the same way . Note that the last train leaves the Uetliberg-Station at 11.30pm.

The organization w.r.t. reserved trains and groups is announced at the conference.

This and that

Power adapter
Switzerland predominantly uses Type J-power plugs. Type C (Europlug 2.5 A/250 V ungrounded) work as well. They all run on 220v. Bring a converter and check wikipedia:
http://en.wikipedia.org/wiki/AC_power_plugs_and_sockets

Wireless
Use the wireless network **public** and connect with the username and password provided in the registration package.

Drinking water
The water from the fountains and the tap is drinking water of good quality.

Public transportation
Public transportation is very convenient in Zurich, there is always a nearby station. Public transportation typically runs from 5.30am till just after midnight.

Luggage storage
We have some limited storage for bags, poster rolls, etc. in the main building. Contact the registration desk. (The storage room is locked, but there's no warranty.)

Registration
Registration is located right in front of the Audimax.

Semester
The semester is running, so there are plenty of students around. Students have their lunch break from 12-1pm.

Currency
The swiss franc is the currency of Switzerland. The smaller denomination, a hundredth of a franc, is called "Rappen" in German. As of 21st Oct. 2010, 1 CHF is about 1.039 US $ (according to Google, no warranty).

Finding your way around
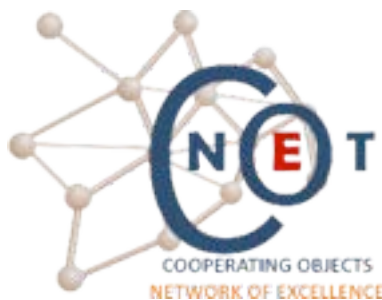As Google has an office in Zurich, we have all the nice features in Google Maps that one needs: Walking directions and directions with public transport are available. Most of downtown Zurich has street view data. This facilitates getting around. Public transportation information can be found at http://www.zvv.ch/en/.

Sponsor

SigArch
SigBed
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SigOps

Supporters

National Competence Center in Research
Mobile Information and Communication Systems

COOPERATING OBJECTS
NETWORK OF EXCELLENCE

nano-tera.ch
swiss scientific initiative in health / security / environment systems

ETH
Eidgenössische Technische Hochschule Zürich
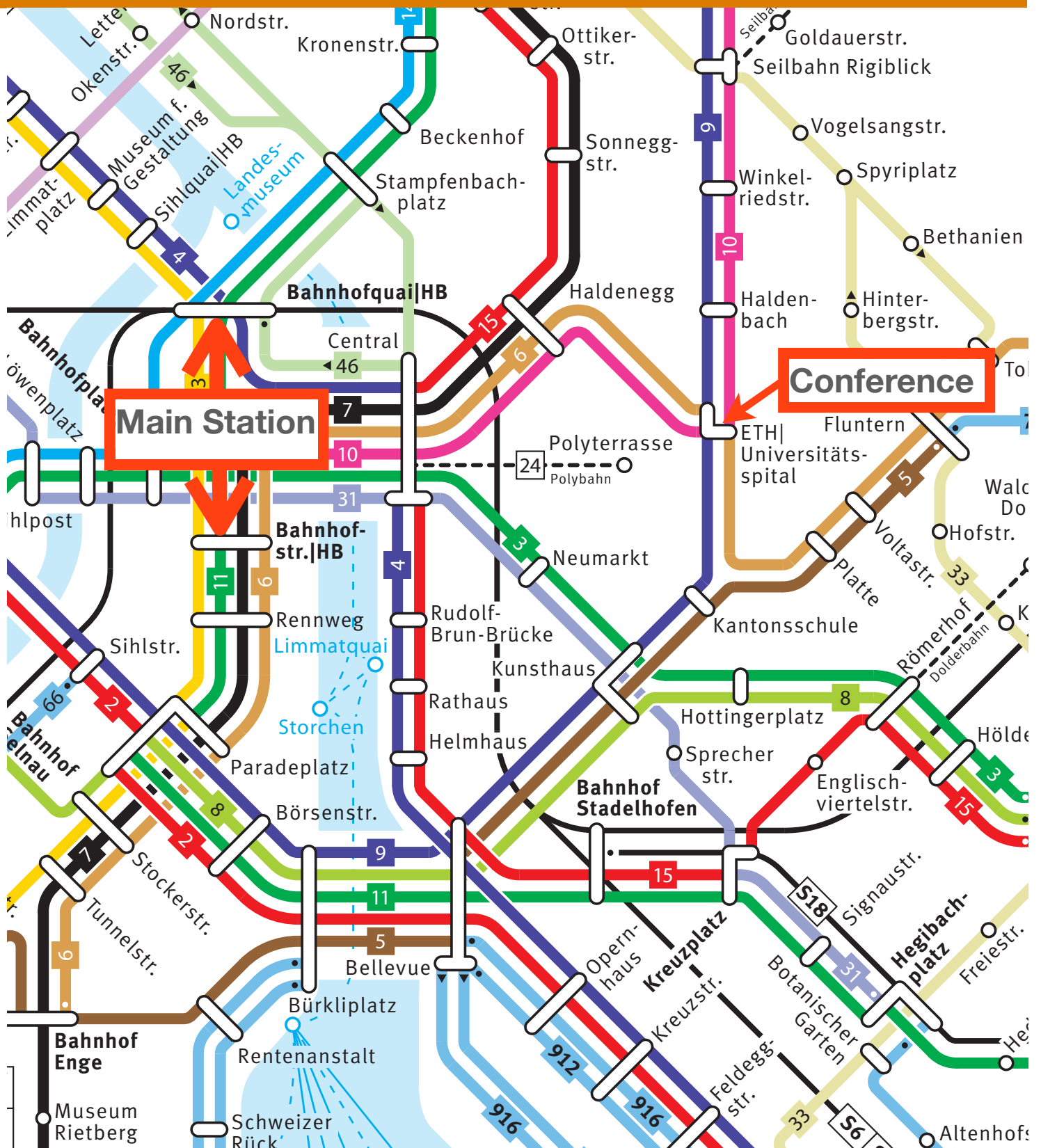Swiss Federal Institute of Technology Zurich

We also thank the Canton and City of
Zurich and Zurich Tourism.

PUBLIC TRANSPORTATION (ZVV)

NETWORK PLAN OF PUBLIC TRANSPORT AROUND ETH AND MAIN STATION