

# DESY Summer Student Program 2013



Olaf Behnke, Doris Eckstein, Andrea Schrader, DESY

The ~90 Summer students at DESY Hamburg come from

- Austria, Bulgaria, Brazil, China
- Colombia, Cuba, Czech, Denmark,
- Egypt, Germany, Greece, India,
- Ireland, Italy, Japan, Mexico,
- Nigeria, Netherland, Pakistan, Poland,
- Romania, Russia, Slovakia, Spain,
- Sudan, Sweden, Thailand, Turkey,
- UK, Ukraine

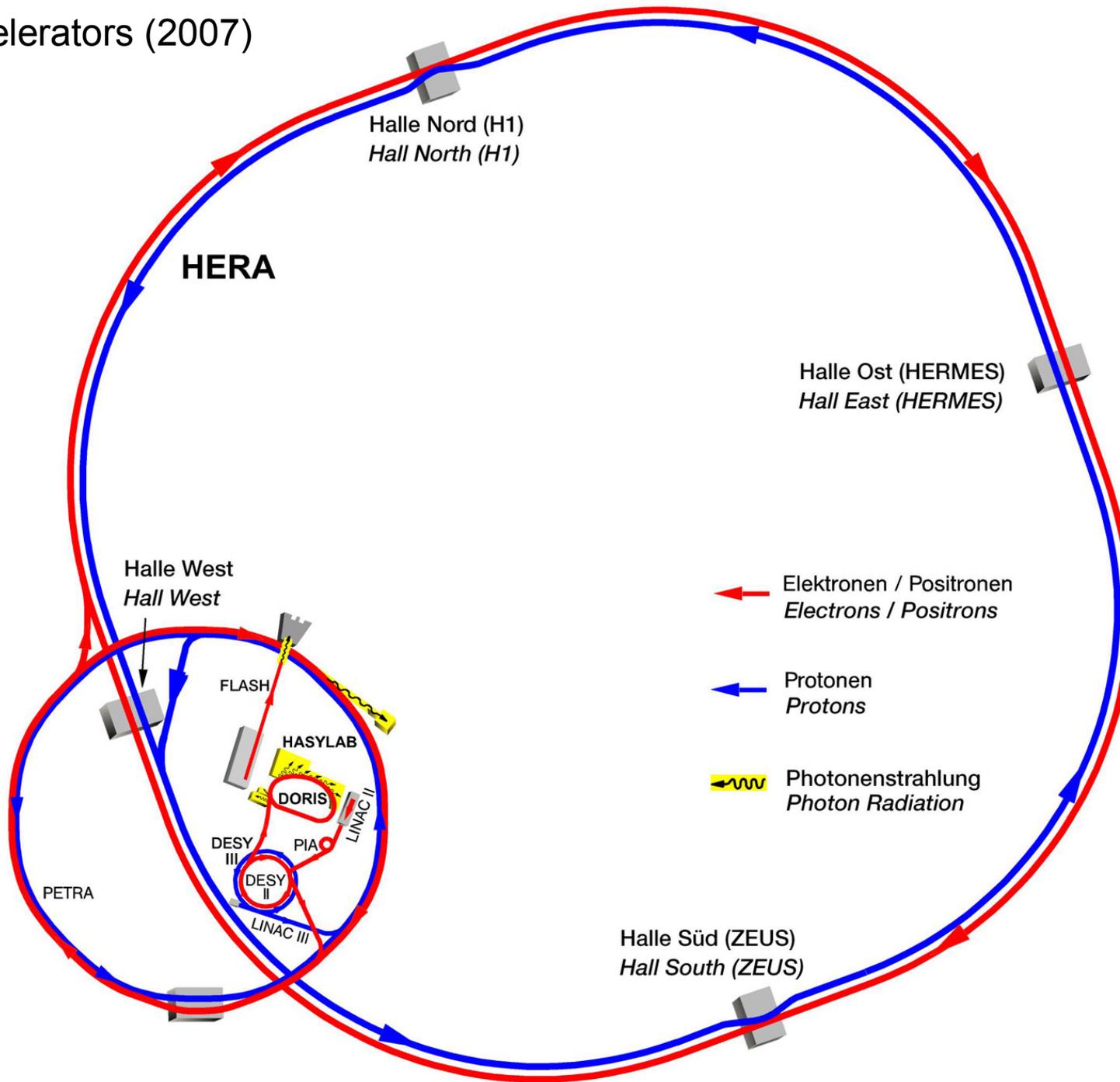
NICE TO  
MEET YOU!

# DESY site in Hamburg

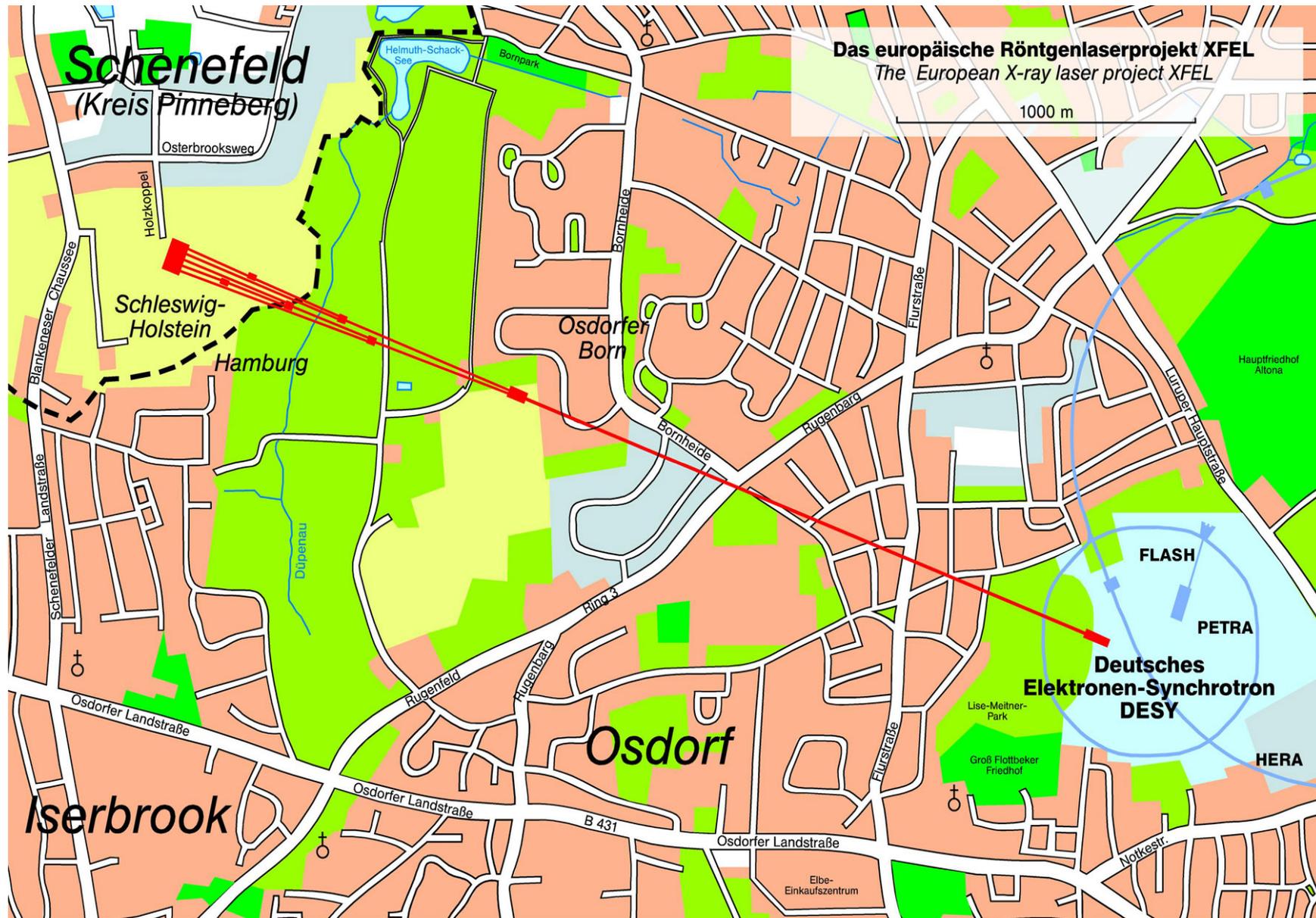


We are HERE now

# DESY accelerators (2007)



# DESY and XFEL (today/future)



# Your Research Projects at DESY :

## ACTIVITIES

DESY Summer Students join groups engaged in the following activities:

### Program A : Experiments with Synchrotron Radiation (only at Hamburg)

- Students join [photon science groups at DESY](#) engaged in fundamental and applied research in the fields of physics, biology, chemistry, crystallography, material science, and geological science. Some of the students will work in the frame of the European XFEL project. The work includes participation in activities like preparation and realization of measurements, evaluation of measured data, and technical improvements of instrumentation.

### Program B : Research in Elementary Particle Physics, accelerators and computing:

- **Experiments in Elementary Particle Physics** Research is concentrated on the following areas:

- the experiments [ATLAS](#), [CMS](#) at the proton-proton-collider LHC,
- the preparations for [experiments at the e+e- International Linear Collider](#),
- the experiments [H1](#), [HERMES](#) and [ZEUS](#) at the electron-proton-collider HERA,
- the [Belle II experiment](#) and
- the experiments [ALPS](#) and [OLYMPUS](#) at DESY.
- At Zeuthen research is done also in the area of [neutrino- and gamma-ray astrophysics](#).

The activities can be characterized by the following categories :

**B1** Physics analysis (software-oriented)

**B2** Data processing (software-oriented)

**B3** Development of experimental equipment (hardware-oriented)

- **B4 Research on Accelerators**

Students join groups engaged in the development of accelerators. Activities include prototype projects for an [e+e- linear collider](#) with an emphasis on superconducting rf cavities and projects for beamline instrumentation and plasma wakefield acceleration. In Zeuthen students can actively participate in the development of the photo injector test facility PITZ.

- **B5. Theory of Elementary Particles**

Students acquire some elementary insight into topics from the wide spectrum of research carried out at the [DESY Hamburg theory group](#), the [DESY Zeuthen theory group](#) and at the [NIC institute](#). Depending on previous knowledge, activities typically range from further reading, with discussions of theoretical concepts and research methods, to participation in simple research projects. Students are encouraged to indicate in their application if they have a preference for a particular field of research pursued in the theory groups.

- **B6. Computing**

At [DESY Hamburg](#) students can participate in various areas of scientific computing such as Grid and Cloud, data management (dCache), high performance (HPC) and GPU, and in infrastructures for analysis. At Zeuthen students participate also in tests and software development for [powerful parallel computers](#)

Lecture programme: hold by DESY researchers to elucidate/provide the background for the DESY scientific research

16<sup>th</sup> july - 25<sup>th</sup> july (plus extra dates 31<sup>th</sup> july and 12<sup>th</sup>/19<sup>th</sup> august) : Common lectures for all students

<https://indico.desy.de/conferenceOtherViews.py?view=standard&confId=7744>

From 26<sup>th</sup> july on:

Separate lectures for Particle Physics (B1-B6) students

<https://indico.desy.de/conferenceOtherViews.py?view=standard&confId=7744>

Separate lectures for Photon Science (A) students

[http://photon-science.desy.de/news\\_\\_events/summer\\_students/lectures/program\\_2013\\_photon\\_science\\_\\_\\_sr/index\\_eng.html](http://photon-science.desy.de/news__events/summer_students/lectures/program_2013_photon_science___sr/index_eng.html)

Please check regularly above webpages for possible programme updates

# The DESY Site :

HASYLAB R. Gehrke 25B 221  
 HASYLAB Lectures room 25F 456

A. Schrader 1e/01.518

Some Lectures in SR2

Some Lectures in SR4

O. Behnke 1a/01.132

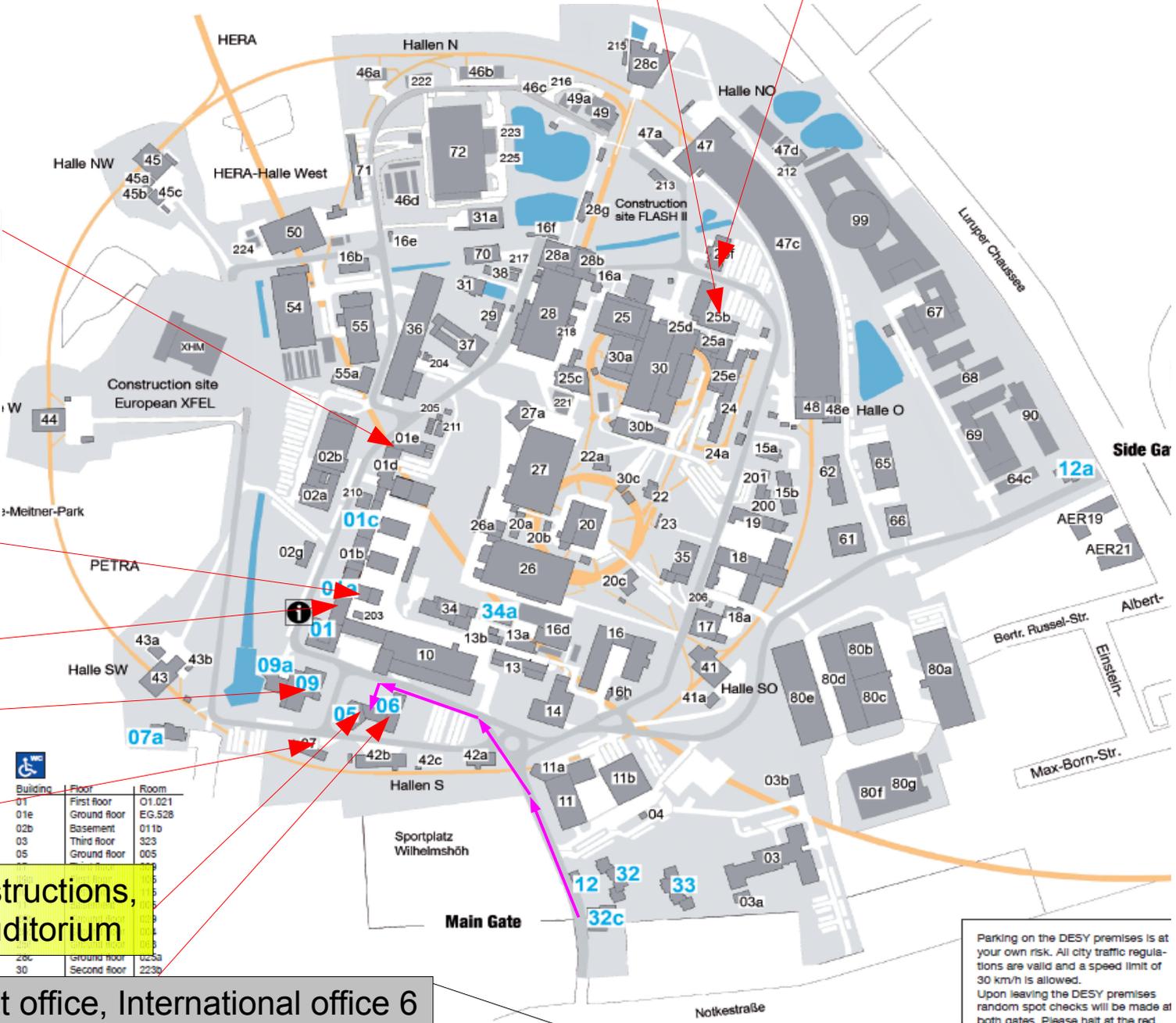
D. Eckstein 1a/02.113

Canteen

Administration 7

Welcome session, safety instructions,  
 First lectures 16-19<sup>th</sup> july Auditorium

Guest office, International office 6



Parking on the DESY premises is at your own risk. All city traffic regulations are valid and a speed limit of 30 km/h is allowed. Upon leaving the DESY premises random spot checks will be made at both gates. Please halt at the red

## NEXT STEPS :

When will I  
get my first  
salary payment? \*\*\*

- Registration (after this talk in the foyer of the Auditorium)

You will meet them all:  
So visit first the person  
with the shortest queue  
of waiting students

- International Office (Steffi Killough et al)
- Administration (Regina Hoppmann, Annette Petterson)
- Travel cost (Christina Tornau)
- General (Andrea Schrader)

- ~11h30: Meet your Supervisor, chat, have lunch

The supervisor is your main contact person at DESY,  
he/she will introduce you to the experimental/theoretical DESY research group  
you will work in and take care of all work organisational matters, etc.

- 14h00 Safety instructions here (they are essential)
- Lectures start Tomorrow 9:00 in auditorium

Additional Welcome Session for the DESY Photon Science  
Summerstudents on Tuesday, July 16 , time 15:00h - 16:00h, location  
Room 456 in building 25F

# INFORMATION on WEB :

Main page

<http://summerstudents.desy.de/hamburg/>

Message board:

[http://www.desy.de/f/students/summer\\_home\\_2013.html](http://www.desy.de/f/students/summer_home_2013.html)

Special events during the first two weeks



## Summerstudent programme 2013 at DESY - Hamburg

Official announcements for the DESY summer students will be made here. Please read and react. All places mentioned in the following can be found on the [DESY Hamburg map with marked places](#) (or see the [full map](#).)

- Tuesday 16/7 10:00-11:30, DESY auditorium building 5: **Opening Session and Registration** . Since also the registration takes place at this occasion please bring all the necessary documents mentioned in [administrative procedures](#) with you.
- Wednesday 17/7 at 10:45, stairs at the entrance to the foyer of the DESY auditorium:  
**A photo** of the summer students will be taken after the lecture.
- Friday 19/7 at 18:00, DESY Canteen Extension bld. 9:  
**Welcome dinner**.
- Tuesday 23/7 at 14:30 or Wednesday 24/7 at 09h00-13h00: SR4:  
[C++ Lecture](#). This is voluntary, for interested persons. Registration: 18th-22th july after the morning lectures. Enter your name in the lists in the foyer of the DESY auditorium.
- Tuesday 23/7 at 14:30 or Wednesday 24/7 at 14:30:  
**Guided tour around the DESY site: the meeting point is the Foyer of bld. 1**. Please take note that we will split: half of the students can attend tuesday, the other half wednesday. Allocation: 18th-22th july after the morning lectures. Enter your name in the lists in the foyer of the DESY auditorium.
- Tuesday 23/7 at 17:30 SR4:  
Start of **German language course**. This is voluntary, for interested persons. The german courses take place twice a week, tuesday and friday The beginners course is from 17h30-18h30 and the advanced course is from 18h30-19h30. The allocation to the two courses is done on the first date: 23/7 17h30-18h30.

## Communication :

Communication is done via the web and email.

You gave an email address when you applied.

To make sure that we have your correct email address send me ([obehnke@mail.desy.de](mailto:obehnke@mail.desy.de)) an email under which I can reach you during your stay at DESY

You are expected to check the web and your email daily !

Lets create a facebook page: DESY Summer Student 2013

For exchanging social messages (e.g. I will post some ideas for weekend recreational activities in Hamburg and surroundings)

# 1. Checklist for other important things than working or attending lectures:

- I want to get from A to B (public transport)
- I want to buy something
- I want to meet with my friends in some nice location
- I want to have dinner in a nice restaurant
- I want to drink a beer after dinner
- I want to do sports

## Public transport routes/schedule:

[http://www.geofox.de/base/initPersonalSchedule.do?STYLE=hbt&LANGUAGE=en\\_GB](http://www.geofox.de/base/initPersonalSchedule.do?STYLE=hbt&LANGUAGE=en_GB)

# Public transport tickets

File Edit View History Bookmarks Tools Help

www.hvv.de/en/tickets/

No sweat - we'll run you there in comfort!

Mehr als ein Ziel **HVV**

- ▀ Abo-Karte all year travel pass
- ▀ Weekly-/ Monthly season tickets
- ▀ Single tickets
- ▀ Day tickets
- ▀ Service centres / Sales points

search term  **Search**

## Tickets

No matter how often or how far you intend to travel – we are sure to have the right ticket just for you. All tickets are on offer at fair prices for specific times and areas of validity. Below we have compiled certain key information for your attention. You will find further details on our tickets in the left-hand menu.

And keep in mind: Children under 6 years of age travel free-of-charge on HVV services!

### Single Tickets (Einzelkarten)

Single tickets are valid for one trip and 1 person.

New: The Short-trip Ticket – make a short hop at a low price within our HVV Großbereich, the Greater Hamburg Area!

### Day Tickets (Tageskarten)

Day Tickets are valid for unlimited travel on the date of issue.

Valid for travel by 1 adult and 3 children (6 to 14 years inclusive), the 9 am Day Ticket is valid after 0900, the All-day Ticket all day long. Also valid after 0900, the am Group Ticket may be used by up to 5 persons.

A 9 am Day Ticket can often make sense for just two trips on the day you select, the 9 am Group Ticket even when only two of you are travelling.

Buy Single and Day Tickets from any bus driver or ticket vending machine.

Shell - Konsole  
pine - Shell - Konsole  
Shell - Konsole <4>

Shell - Konsole <6>  
Shell - Konsole <3>  
Shell - Konsole <5>

**HVV - Tickets - Mozilla Firefox** welcome2012.odp - OpenOffice.org  
snapshot7.png - KSnapshot  
snapshot8.png - KSnapshot

12:44  
Tuesday  
2012-07-17

# Public transport tickets

Price reduction (fill form available from Andrea)

## Season Tickets (Zeitkarten)

**General season tickets**  
If you intend to travel regularly on HVV services our bargain-price weekly and monthly season tickets are just right for you. Monthly season tickets can also be purchased on direct-debit subscription, ie you authorize us to book the monthly amount due direct from your bank account. Travel for 12 months and only pay for 10.

**CC-Ticket off-peak travel passes**  
If you don't have to travel during peak periods we recommend a CC-Ticket off-peak travel pass. These are valid for 1 person + 3 children (6-14 years inclusive), Mon-Fri 0900-1600 and after 1800, all day long on Sat, Sun or public holidays.

**Senior citizen season tickets (Seniorenkarten)**  
These tickets are valid for 1 person aged 63 years or over, Mon-Fri after 0900 and all day long on Sat, Sun or public holidays.

**Reduced-price concessionary season tickets:**  
Concessionary season tickets are available for children, trainees / apprentices and students.

**Season tickets including 1st class**  
With a season ticket including 1st class you may travel 1st class on regional rail and on SchnellBus limited stop services within the HVV service area.

All HVV season tickets consist of a customer photocard and a corresponding coupon indicating the period of validity. You can obtain the voucher at any HVV service centre where we'll be glad to advise you personally.

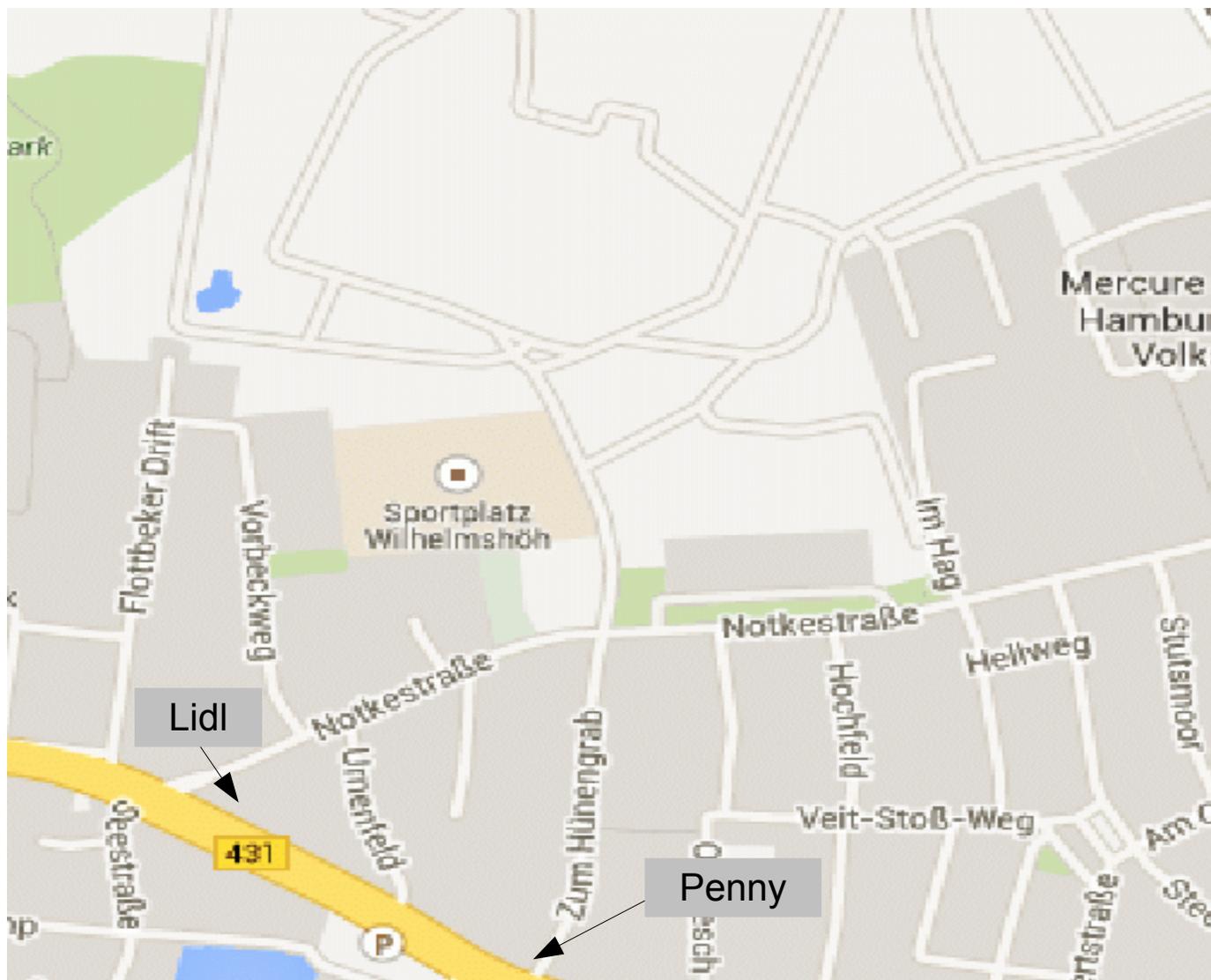
**Sozialskarte (Welfare Ticket):**  
Hamburg citizens with a Sozialskarte (Welfare Pass) are entitled to a price concession of 18 Euros respectively per month and person paid by the Free and Hanseatic City of Hamburg on HVV monthly season tickets, the Abo-Karte (all-year travel pass) and ProfiCard (Job Ticket). Information on the Sozialskarte is available on the web pages of [hamburg.de](http://hamburg.de) (new window).

**TIP: When planning a trip enter the mask for our HVV Timetable Information service and let the assistant guide you to your personal timetable.**

Related link  
→ [Personal timetable](#)

About us German Sitemap Data Privacy and Protection Publication Data Extranet

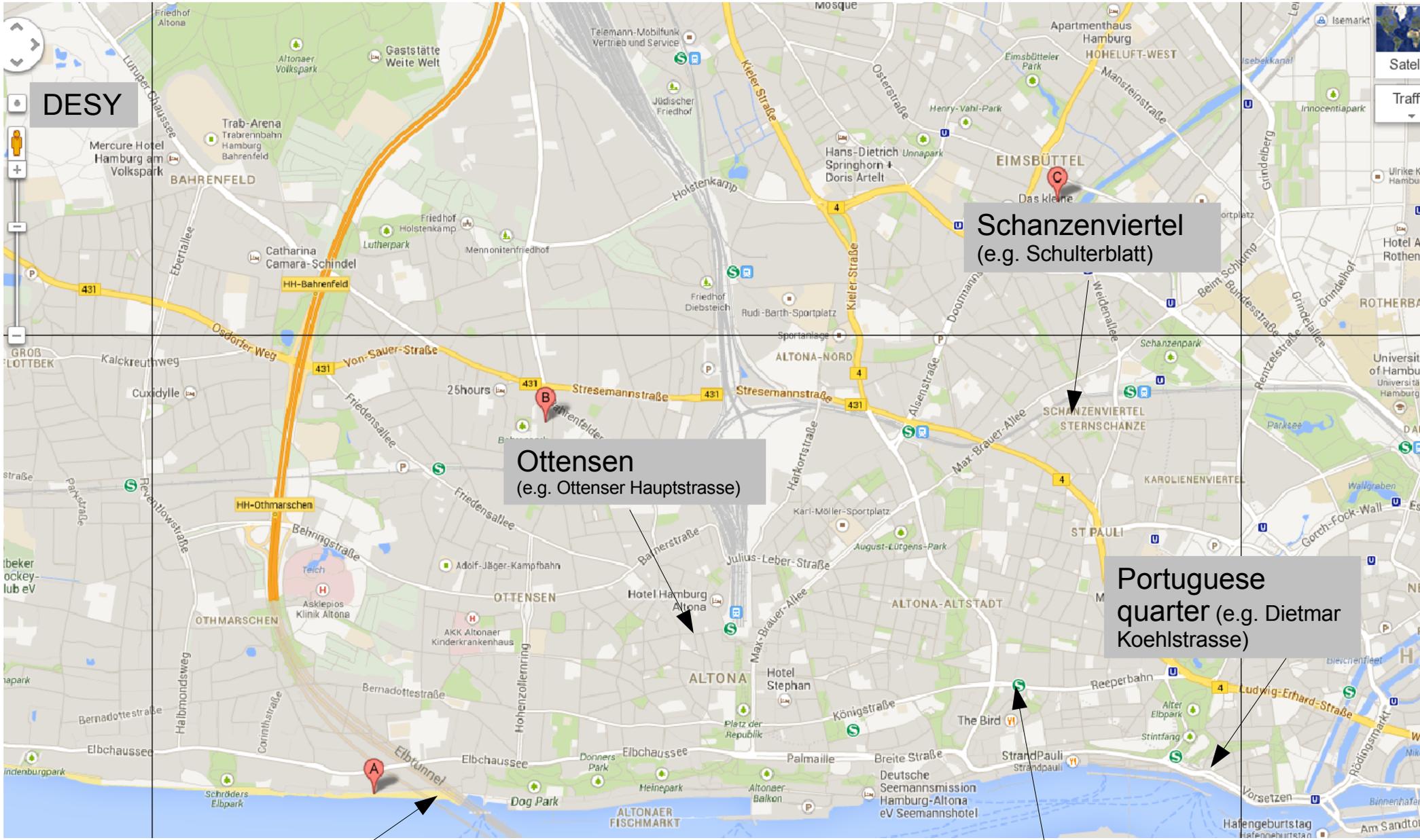
## Supermarkets (cheap!)



## Some shopping centres



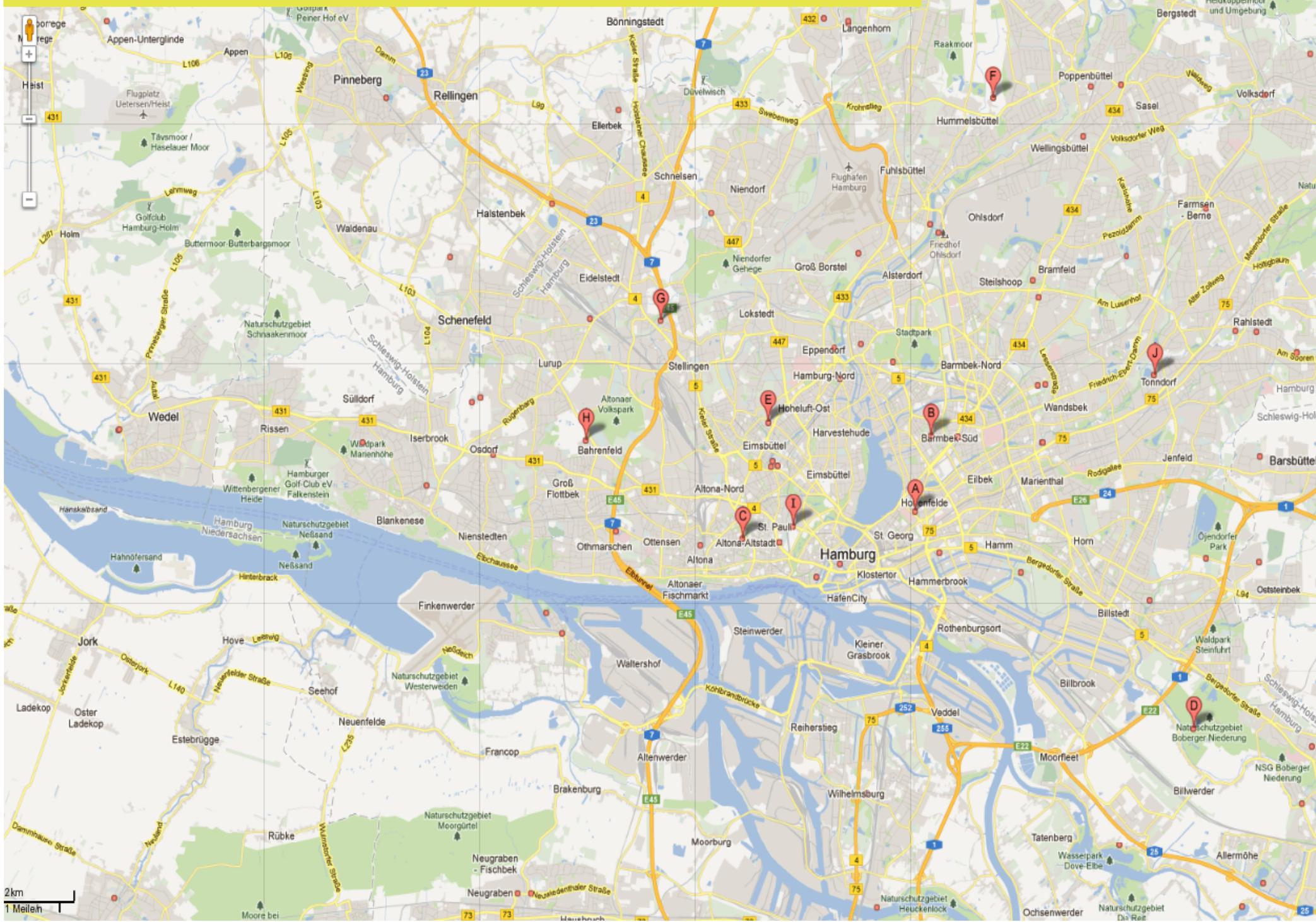
# Cool places, Dinner, Nightlife



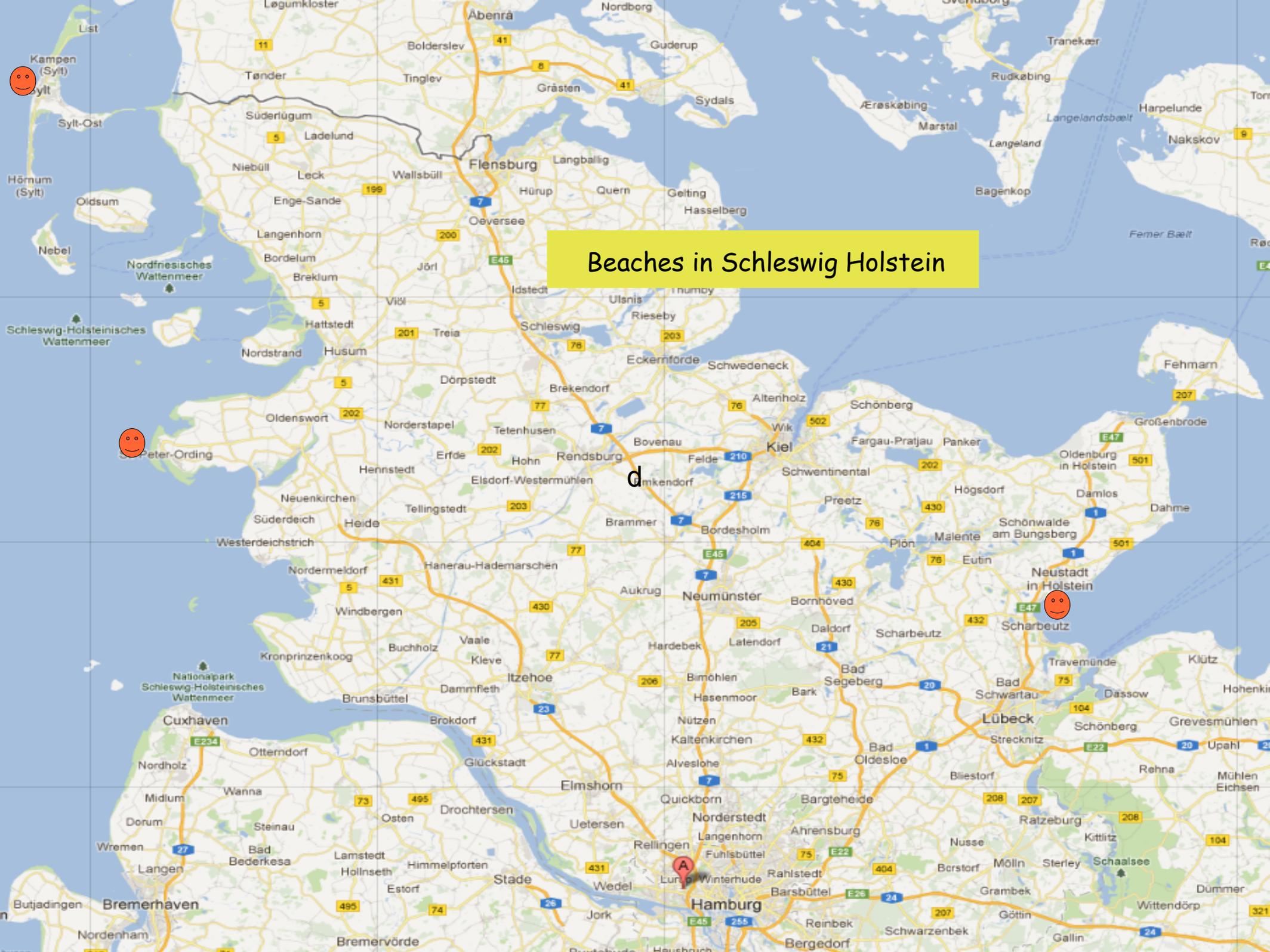
Oevelgoenne beach

St. Pauli (e.g. Hamburger Berg)

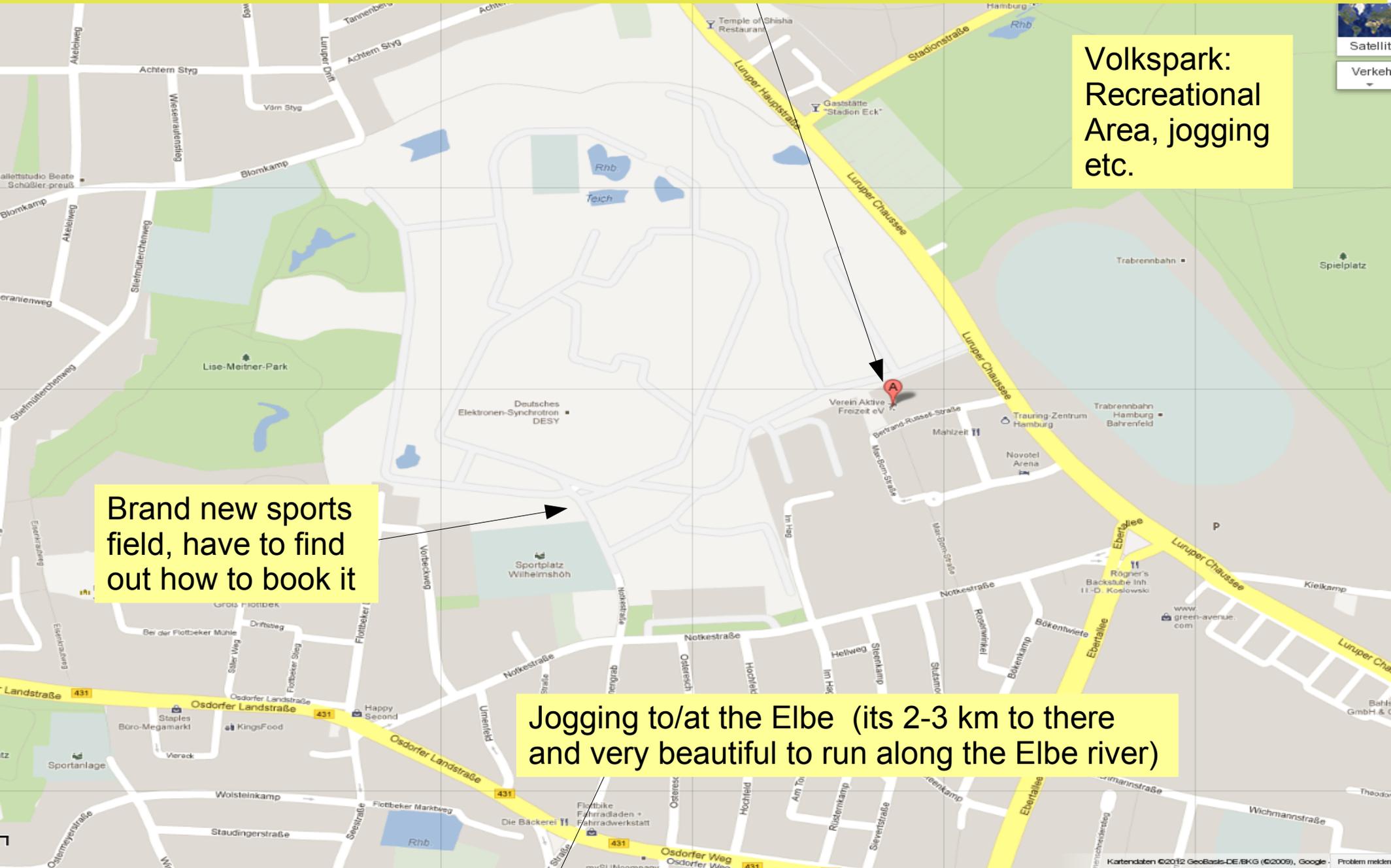
# Sports: swimming pools in Hamburg: google 'Hamburg Schwimmbad'



# Beaches in Schleswig Holstein



# One out of many possibilities for fitness: vafev.de



Volkspark:  
Recreational  
Area, jogging  
etc.

Brand new sports  
field, have to find  
out how to book it

Jogging to/at the Elbe (its 2-3 km to there  
and very beautiful to run along the Elbe river)

For playing piano: visit office 110, bld. 6, fetch formular and fill it,  
after approval you can fetch key at the DESY gate (gate keeper)

## Some more (very very random) miscellaneous information:

- Sports: Volleyball field in front of Hostel
- Bikes: cannot be rented at DESY :-(
- One possibility is to rent at <http://stadtrad.hamburg.de>
- Drinking water: in germany you can drink the water from the tap (it has highest quality, better than mineralwater, no need to boil it)
- Discover Hamburg with a boat – take ferry line 62, you can use normal public transport tickets, the same price as for a bus/train ride)
- See the sunset from 150 m altitude ballon <http://www.highflyer-hamburg.de/>



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