

DESY Summer Student Program 2023: Welcome Session

Introduction to the Program

Olaf Behnke, Carolin Leao Grötzinger, Friederike Januschek, Ute Micheelsen, Britta Niemann, Andreas Przystawik, Andrea Schrader, Nicholas Styles

DESY Hamburg, 18.7.2023



Welcome!

Diversity is our strength!

- 63 Summer students at DESY Hamburg come from 23 Nations :

- Austria (AT): 1
- Canada (CA): 1;
- China (CN): 2
- Cuba (CU): 1
- Czech Republic (CZ): 1
- Germany (DE): 8
- Egypt (EG): 1
- Spain (ES): 6
- United Kingdom (GB): 1
- Ghana (GH): 1
- Israel (IL): 1
- India (IN): 2
- Italy (IT): 21
- Japan (JP): 1
- Nigeria (NG): 1
- Netherlands (NL): 1
- New Zealand (NZ): 1
- Poland (PL): 3
- Russia (RU): 1
- Sweden (SE): 2
- Slovakia (SK): 1
- Thailand (TH): 4
- Turkey (TR): 2
- United States of America (US): 2



Deutsches Elektronen-Synchrotron DESY

A research centre of the Helmholtz Association



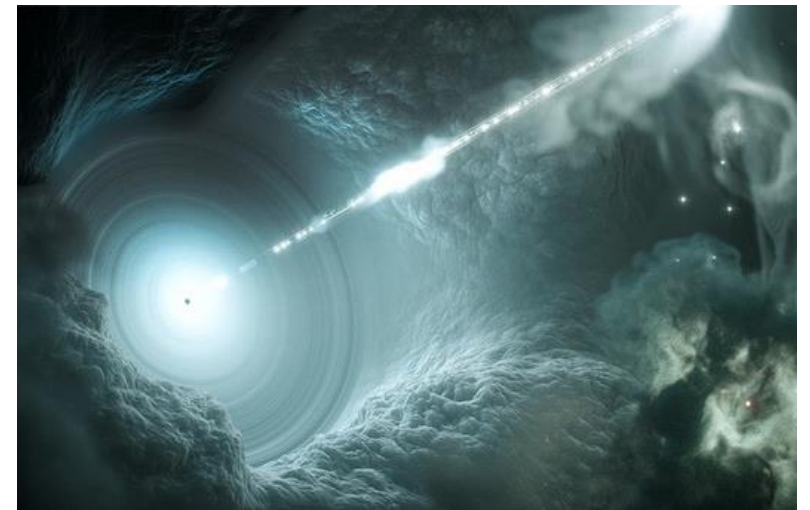
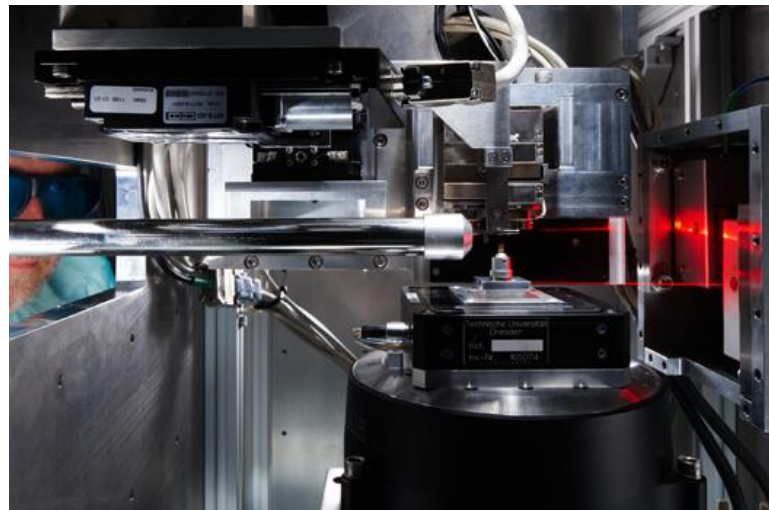
- A publicly funded national research centre
- Established in Hamburg on 18 December 1959
- **Locations:** Hamburg and Zeuthen (Brandenburg)
- **Base budget:** 349 million euros
- **Employees:** approximately 3000, including 1300 scientists
- **Guest scientists:** more than 3000 from over 40 countries each year
- **Young scientists:** approximately 500 doctoral candidates and postdocs, a number of master students



HELMHOLTZ RESEARCH FOR
GRAND CHALLENGES

Research at DESY

- DESY research is extremely diverse, research divisions are:
 - High Energy/Particle Physics
 - Photon Science
 - Accelerators
 - Astroparticle Physics
- Key to research at DESY are also its large-scale infrastructures
 - PETRA III → PETRA IV
 - FLASH
 - European XFEL
 - IDAF



DESY and XFEL Tours

Please register and learn more!

- DESY Tours: July 24th and 25th; 2-4 pm, 30 students each
 - A footwalk tour is organised around the DESY site, at the meeting point you will be split into two groups. The tour comprises visits of the HERA hall west, PETRA III etc.
 - <https://indico.desy.de/event/40247/>
 - <https://indico.desy.de/event/40248/>
 - meeting point: Foyer of Building 1
 - please register until Friday!
- XFEL Tour: August 14th, 9am -1 pm
 - We will do a tour of the XFEL experimental site in Schenefeld. The tour includes an introductory talk and a visit to the experiments.
 - <https://indico.desy.de/event/40492/>



Research Projects

- Program A: **Photon Science**
- Program B: **Research in Elementary Particle Experiments, Accelerators, Theory of experimental particles and Computing, Experiments in Elementary Particle Physics**
- Program C: **Research in Astroparticle Physics**

Solid-state physics and nanoscience

Astroparticle physics analysis and observations

Soft-matter sciences

Computing

Instrumentation for Astroparticle Physics

Physics analysis (software-oriented)

Research on Accelerators

Theory of Astroparticle Physics

Lasers and optics

Theory and computing

Theory of Elementary Particles

Development of experimental techniques

Data processing (software-oriented)

Molecular sciences

Development of experimental equipment (hardware-oriented)

Lecture Program

Please attend!

- The lecture program consists of lectures providing introductions and overviews on selected key topics of DESY research in Particle and Astro-Particle Physics, Photon Science, as well as in Accelerators. The lectures cover both experimental and theory aspects.
- <https://indico.desy.de/event/39610/>
- Please check Indico for changes of time and venue.
- Everybody should attend all common lectures and the respective lectures for Program A or B.

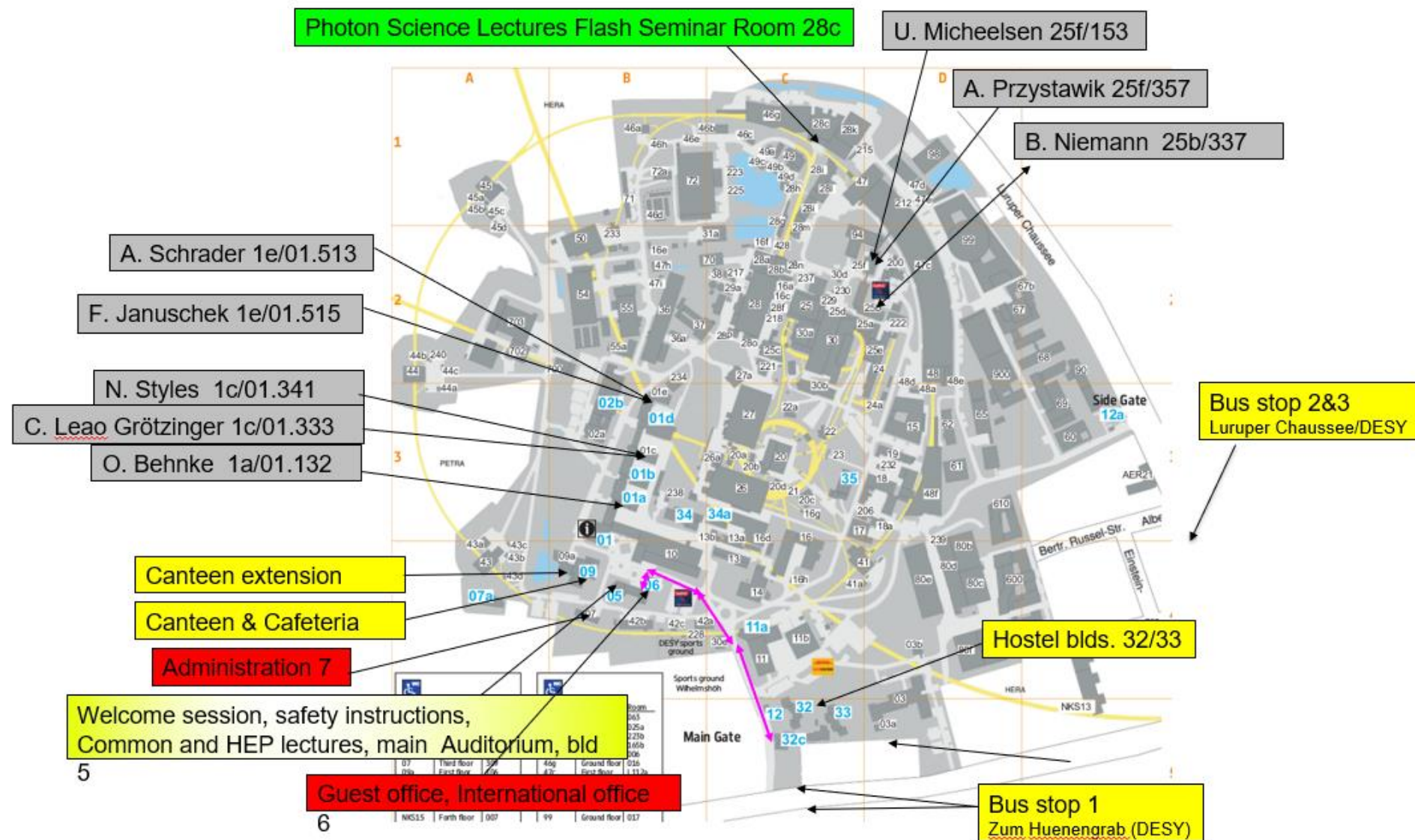
Monday, July 17, 2023	Tuesday, July 18, 2023	Wednesday, July 19, 2023	Thursday, July 20, 2023	Friday, July 21, 2023
			9:30 AM Introduction to HEP 3	9:30 AM Introduction to HEP 4
		10:30 AM Introduction to HEP 1	10:30 AM Introduction to Photon Science 1	10:30 AM Introduction to Photon Science 3
		11:30 AM Introduction to HEP 2	11:30 AM Introduction to Photon Science 2	11:30 AM Introduction to Photon Science 4
Monday, July 24, 2023	Tuesday, July 25, 2023	Wednesday, July 26, 2023	Thursday, July 27, 2023	Friday, July 28, 2023
10:30 AM Accelerator physics 1	10:45 AM Accelerator physics 3	10:00 AM PS: Reciprocal Space and Principles of Diffraction	10:30 AM Dark Matter 1	10:30 AM Astroparticle Physics 1
11:30 AM Accelerator physics 2	11:45 AM Accelerator physics 4		11:30 AM Dark Matter 2	11:30 AM Astroparticle Physics 2
Monday, July 31, 2023	Tuesday, August 1, 2023	Wednesday, August 2, 2023	Thursday, August 3, 2023	Friday, August 4, 2023
10:00 AM PS: Modern Crystallography: Processing Petabytes of Data	10:00 AM PS: X-ray Spectroscopy of Quantum Materials - Markus Scholz (FS-FLASH (FLASH))		9:30 AM Particle Physics Detectors 1	9:30 AM Particle Physics Detectors 4
10:30 AM Particle Physics Theory 1		10:30 AM Particle Physics Theory 3	10:00 AM PS: Scattering Methods for Investigation of Sustainable Materials	10:30 AM Particle Physics Detectors 5
		11:30 AM Particle Physics Theory 4	10:30 AM Particle Physics	11:30 AM Particle Physics Detectors 6

Your work at DESY

- Your weekly **working time** of 39 hours will be a combination of the lecture time, the work on your work project and other things like group meetings etc
- All students should have the chance to **present** their project work and results at least at once to their DESY group (e.g. towards the end of the project)
- Everybody is expected to write a **report** on their project (about 10 pages) at the end of the program
- General recommendation for project work: don't be shy, be pro-active and don't hesitate to ask your supervisors questions and give feedback!
- **Summer Student Session:** <https://indico.desy.de/event/40249/> with presentations from some of you:
 - Wednesday Sep 6 - Thursday Sep 7, 09:45 - 12:30, Main Auditorium Bld. 5

Places you should know

For reference



Places you should know

For reference

https://www.desy.de/f/students/summer_home_2023.html



Summerstudent programme 2023 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](#)). A [special map](#) shows the pedestrian paths to SR 28c.

People you should know

Your supervisors and group

- After this meeting, you will meet your **supervisors**, who will support you with your project work, but also with some more general issues
- The supervisors will be your main point of contact – do not hesitate to ask them questions!
- Work project technical support: All support is provided locally by the project supervisors and their respective DESY groups, system administrators, etc. → You will be integrated in the DESY groups like normal researchers, for work related questions ask your supervisors or group secretaries!
- Unless you have arranged differently your supervisor will fetch you around 11h00 near the DESY auditorium. Probably they will take you to lunch at the DESY canteen. Your supervisor will introduce you to their group, will show you your work place/office and is responsible for all work matters in their group.

People you should know

The Program Organising Team


- We are a group of people from the particle physics department (B projects) and photon science department (A projects) of DESY
- **Particle Physics:** Olaf Behnke, Carolin Grötzinger, Friederike Januschek, Andrea Schrader, Nicholas Styles
- **Photon Science:** Ute Micheelsen, Britta Niemann, Andreas Przystawik
- Please contact us in case of any program-related issues, administrative or general
- Write an email to: summie-org@desy.de

Welcome session

- <https://indico.desy.de/event/40320/>
- 10:00-10:10 Gathering in the Foyer
- 10:10-10:40 Welcome Talk in the Lecture Hall
- 10:40- ca.11:00 Handling of **administrative procedures** in the Foyer
 - General check-in (if you have not yet done it) and get your welcome bag (all)
 - Personnel Department (all)
 - International office (all non-German citizen)
 - Travel Reimbursement: Please hand in the **travel reimbursement** sheet here or at the DESY travel department: C. Tornau, bld 7/405. We recommend to do that within few days after the program starts. For questions ask here or write to christina.tornau@desy.de afterwards
- 11:00-11:30 **Students meet their supervisors in front of the auditorium/in the Foyer**
- 14:30 for B students (HEP): General Safety instructions in the auditorium (for Photon Science students will be arranged for separately)



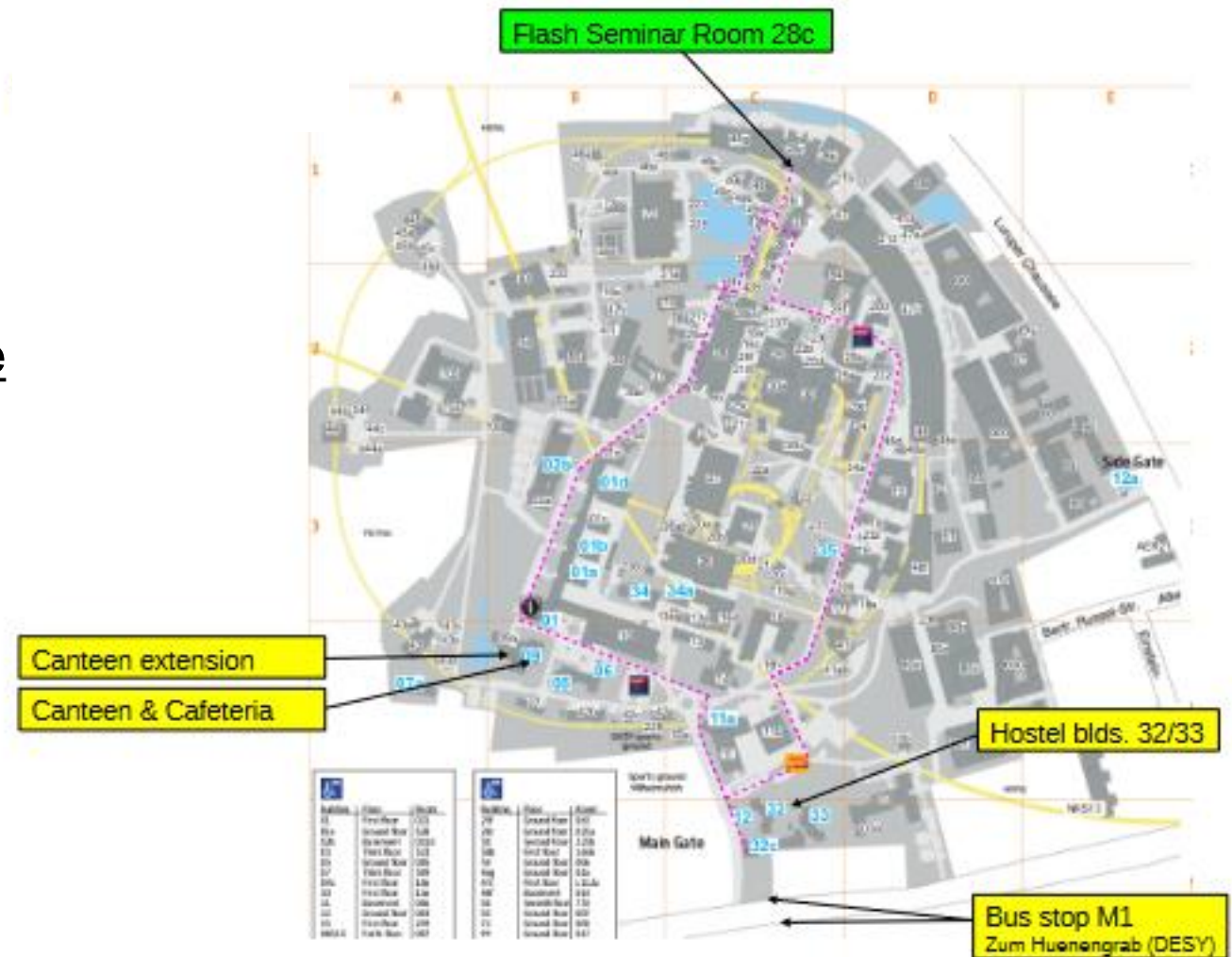
Right now ongoing



Be back here! Sign form!

Welcome Coffee & Cake

- Please join us for a Welcome Coffee and Cake today at 4 pm in the FLASH Seminar Room, building 28c
- Map available from the Webpage: https://www.desy.de/f/students/2023/map_to_rascale_stat_23.pdf
- Great opportunity to meet the other Summies and ask questions to the organisers!

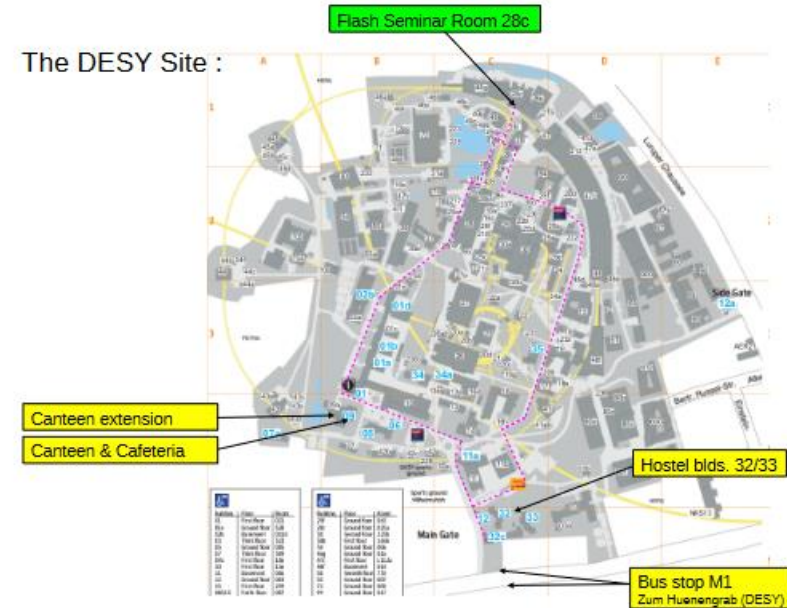


Welcome Dinner

- **Friday 28 July, 18:00 - 22:00, Flash SR 28c:**
Welcome Dinner with buffet and drinks. The summer students from Zeuthen will join us.

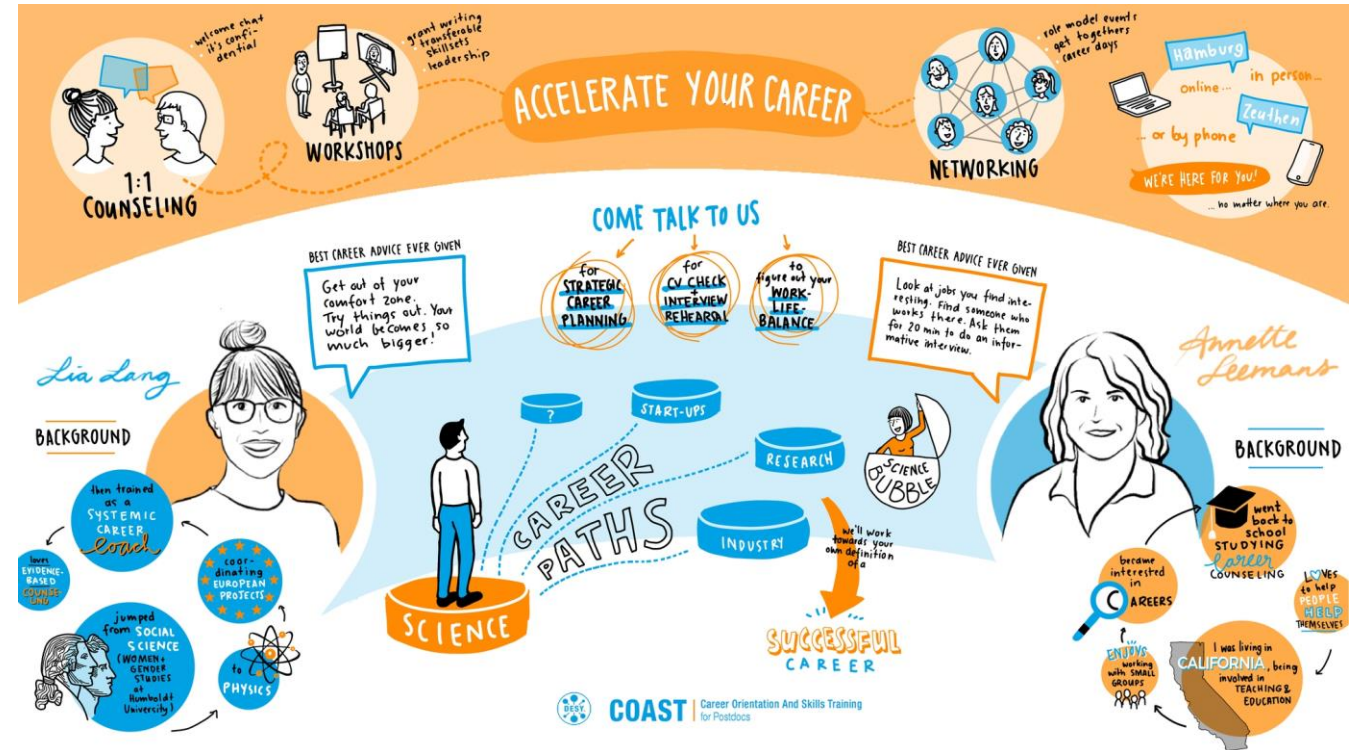


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Career Workshop: Create a Career That Fits

- **Tuesday August 8th , 14:00-16:30**
- <https://indico.desy.de/event/40256/>
- **Aims:**
 - Create awareness on strategic career planning
 - Reflect on your own expertise and values
 - Use tools to help yourself
 - Know the power of peer/horizontal networks
 - Have fun!



- No preparation needed. Please sign up if you know you can attend the complete workshop.
- Registration will be open/available on this page from July 26 - Aug 4

Miscellaneous

- Practical information on the DESY campus → **DESY booklet** https://welcome-services.desy.de/sites2009/site_guest-services/content/e56138/DESY-Welcome-Booklet-2022_eng.pdf
- A **photo** of the summer students will be taken after the first lecture.
- **WLAN**: Science Hotspot or Eduroam and DESY (for DESY devices)
- **Hostel**: Missing equipment (kitchen, cleaning, etc.) or other requests/complaints → don't hesitate to email hostel.service@desy.de (or visit them in their office 06/118)
- DESY **salary** payment end of August and in September: hostel accommodation costs are deduced so total amount of paid out money may appear to be not so high
- **Sickness**: In case you get sick and cannot work, please inform your group assistant and supervisor.
- **Drinking water**: in Germany you can drink the water from the tap, it has highest purity, better than mineral water, no need to boil it

Communication

- Summie Internal and Self-Organised:

- WhatsApp: <https://chat.whatsapp.com/B7dvv3sFO1Y01Q99vAAc2d>
- DISCORD: <https://discord.gg/U7RFa5Uvw2>

- With us:

- Email Summie-org@desy.de
- https://www.desy.de/f/students/summer_home_2023.html
- <https://summerstudents.desy.de/hamburg/>

Four digits when calling internal
0+number, when external
Might need to call 11 for international call

- DESY Phonebook:

- <https://www.desy.de/pbook?lang=eng>

Entry	Keywords	Exact	
Name	<input type="text" value="januschek"/>	<input type="checkbox"/>	Start search
Group	<input type="text"/>	<input checked="" type="checkbox"/>	
Phone	<input type="text"/>	<input type="checkbox"/>	
Room	<input type="text"/>	<input type="checkbox"/>	

Name	Group	Bld >/ Room	ext	Mobile	Fax	PWP
Januschek, Friederike	ALPS,FTX	01E / 01.515	1941			

Public Transport

Deutschland Ticket

- **Bikes:** at DESY there are Stadtrad stations <http://stadtrad.hamburg.de>
- **"Deutschlandticket"**: includes not only the public transport in all Germany, but also regional trains (all trains except InterCity [IC], EuroCity [EC], or InterCity-Express [ICE]) for 49€ per month (full calendar month!). Subscription only. All further information can be found [here](#).
- Alternatives within Hamburg are single trip tickets (3.60€), 9am day tickets (valid for any number of trips the whole day between 9am and 6am the next day, 7.10€), 9am group tickets (valid for up to 5 persons, 13.40€), or week tickets (29€ per week).
- Discover Hamburg with a **boat** – take ferry line 62, you can use standard public transport tickets

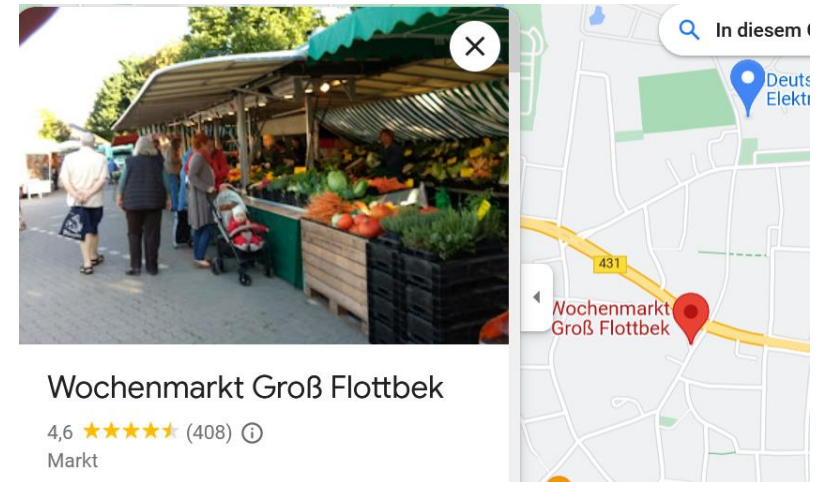


Information about the Hamburg public transport (HVV) → see also Welcome bag

Shopping

Supermarkets and Shopping Centers

- Several supermarkets in the vicinity:
General shop opening hours:
 - Mo-Sa ~07-2x, x=0-3 Su only few convenience stores opened e.g. in Altona railway station
- Weekly market: we + sa 08-13 → fresh products (more expensive)
- Nearest shopping center: Elbe Einkaufszentrum
- Many shops at and around Altona station



ATMs (selection)/Cash Check

To cash your cash check:

Haspa Bank at Elbe-Einkaufszentrum:

Mo.-Fr. 10.00-18.00 Uhr

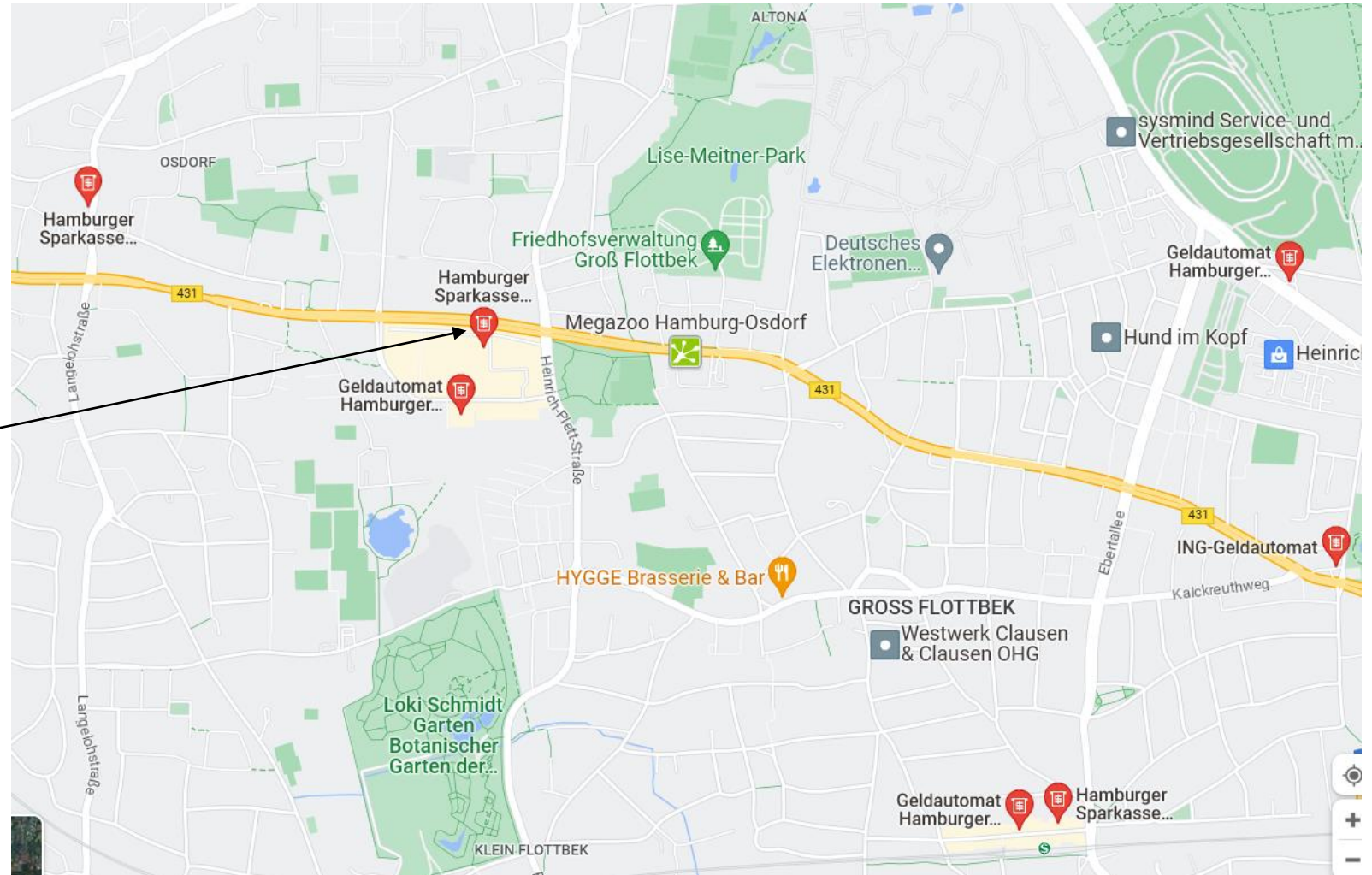
SA. 10.00-16.00 Uhr

Lunch break 13.00-14.00 Uhr

E-Mail: haspa@haspa.de

<http://www.haspa.de>

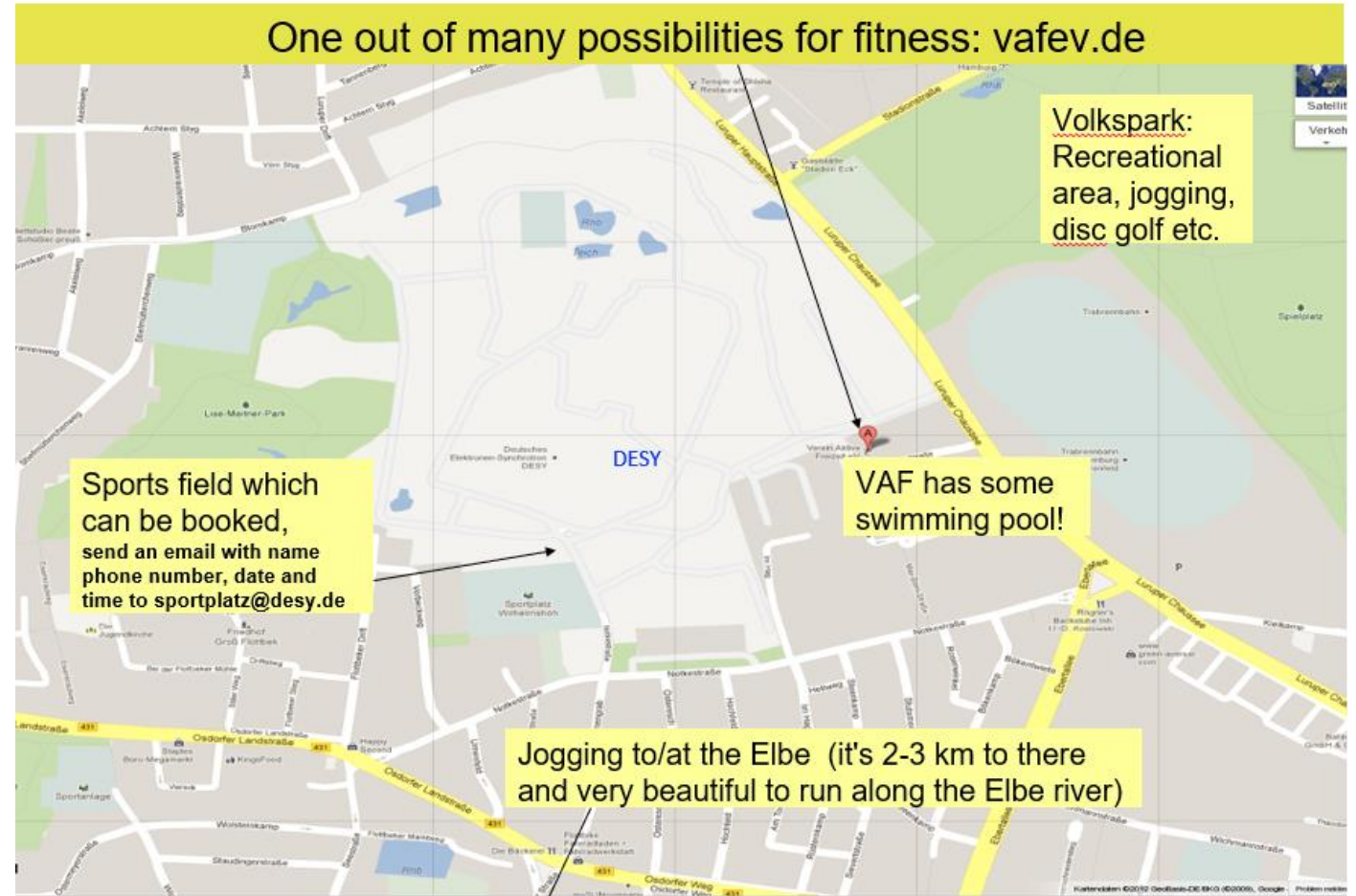
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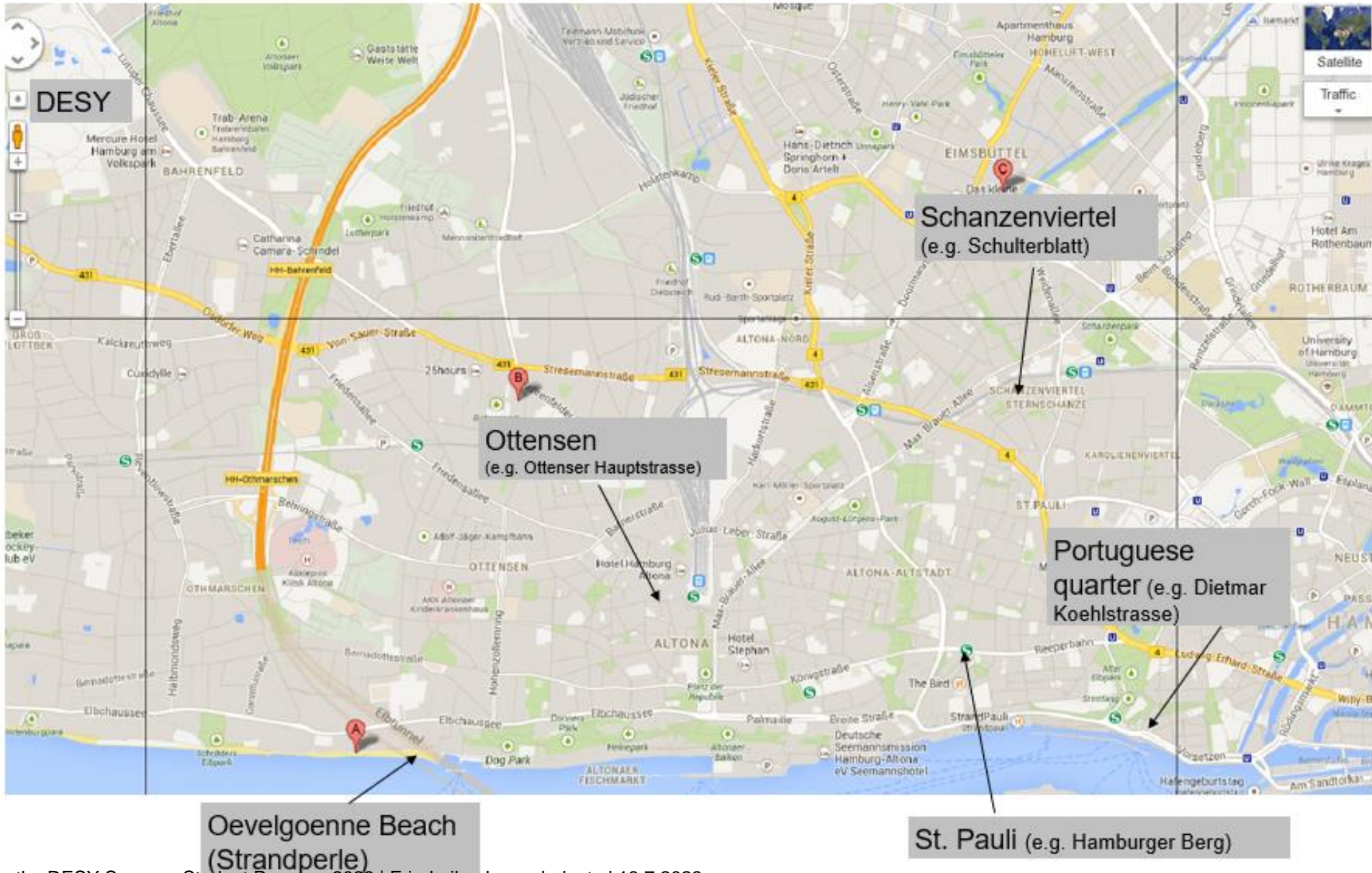
Sports

Many sports possibilities at DESY and beyond: e.g. VAF, but also many options e.g. with urbansportsclub

Swimming pools: see www.baederland.de



Cool Places → also ask your colleagues



Cool Places

Beaches



Sightseeing - Harbour Boat Trip

- We will do a special two hours harbour round trip with a 'Barkasse' ship, where you will learn about the Hamburg harbour history, working place and globalisation and will see many interesting parts of the harbour and ships.
- More information at: <https://indico.desy.de/event/40250/>
- Cost will be about 5,- Euros per person. Registration is closed. The starting point of the tour in the harbour can be found [here](#)

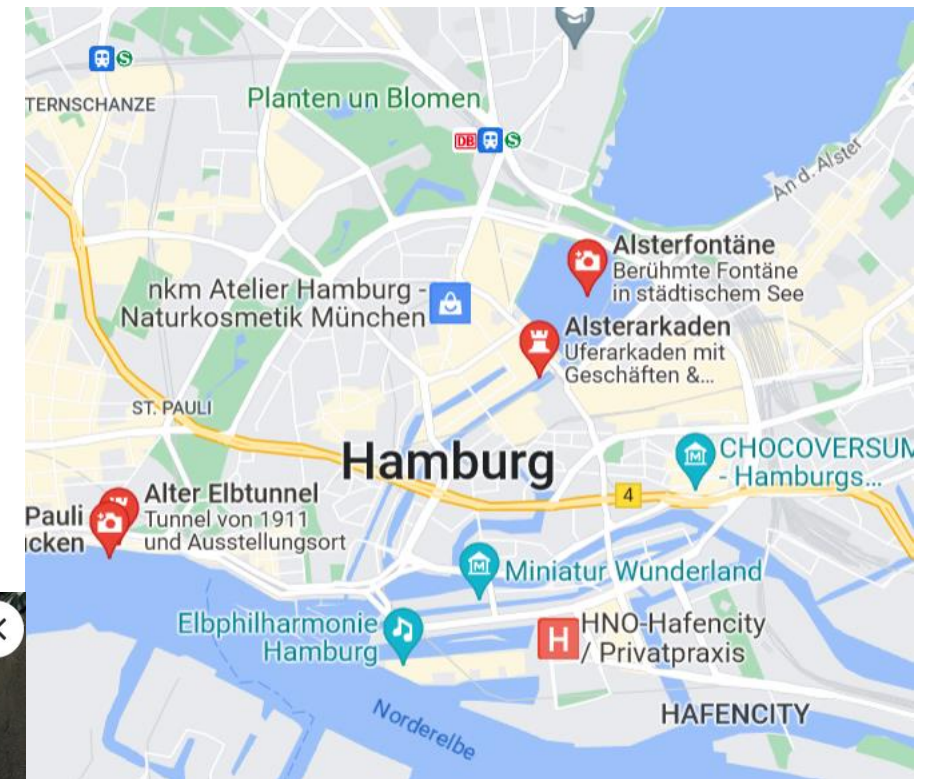


Sightseeing

- Harbour
- Alster
- Elbphilharmonie
- Elbe
- Reeperbahn
- Michel
- Alter Elbtunnel
- Miniaturwunderland
- Treppenviertel Blankenese
-



Elbphilharmonie Hamburg



Reeperbahn



Alter Elbtunnel



Alsterfontäne



Miniatur Wunderland



Treppenviertel Blankenese

Sightseeing

Food and Weather



Labskaus



Rote Gruetze mit
Vanillesauce



Summary



https://www.desy.de/f/students/summer_home_2023.html

summie-org@desy.de

Backup

Where are we?

We are HERE now

