

# Welcome to the Introduction to the Terascale



# A bit of organization

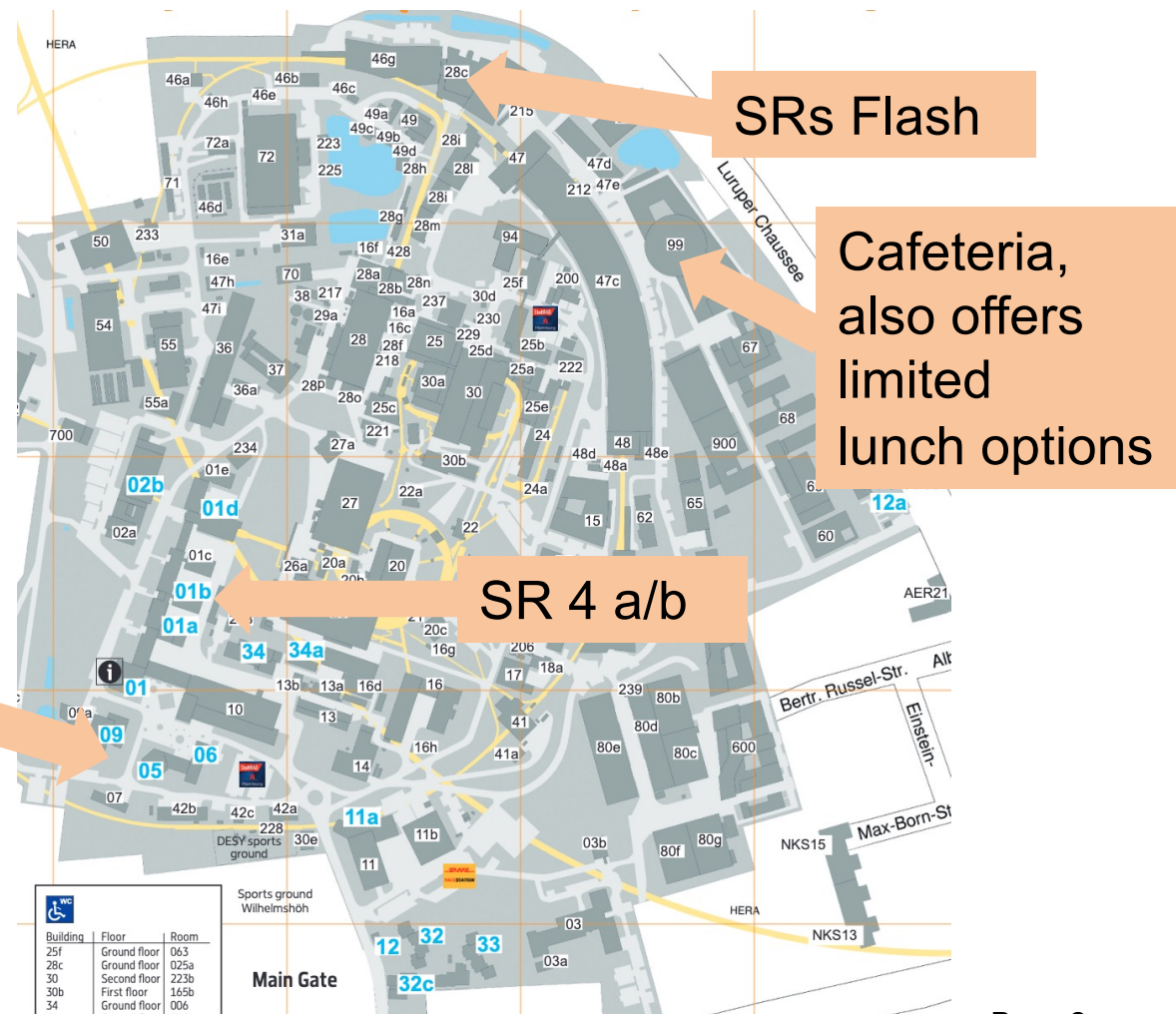
## Rooms and food 😊

- Most lectures and exercises are in SR 4 a/b, only Wednesday will be in SR Flash

The Flash SR is in the upper floor, on top of the experimental hall

- Dinner on Wednesday evening will be in the Canteen extension

Canteen:  
Several choices, always with vegetarian menu option, salad bar, veggies, and a water station after the cashier. Payments only in cash (EC machine at the entrance)



# School dinner

Tomorrow (Tuesday at 19:00)

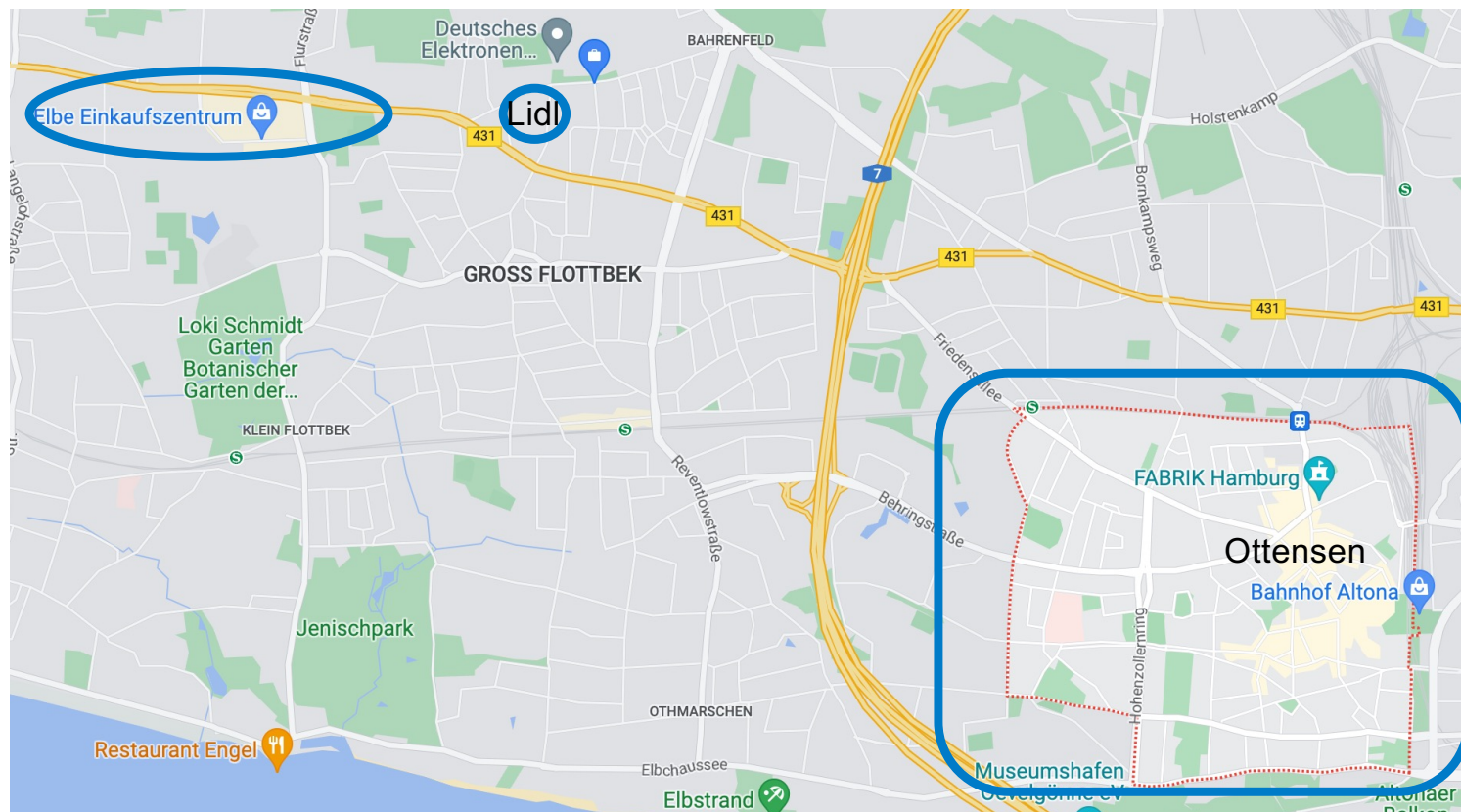
- The school dinner will take place in the Blockbräu at the Landungsbrücken 3, starting at 19:00
- Public transport: if you don't have the Deutschland-Ticket, you will need to download the hvv app to buy a ticket
  - Direct S-Bahn connection from Othmarschen
  - Best to share a 5-person day ticket for the way there and back
- Alternative: Stadtrad Hamburg (there is also a station at DESY), registration is 5 Euro, which can be used for paying the rent in the first year; in general 30 min biking is for free, then 10 ct per minute



# Dinner on the other days

Go for dinner outside or buy something in closeby stores

- Recommendation: restaurants in Ottensen (close to Altona station)
- Get your own food at one of the close-by supermarkets, e.g. Lidl, Aldi, Bäckerei Junge
- Or visit the big shopping mall “Elbe Einkaufszentrum”, which is not too far (there is a food court as well)



# Program

## Day 1-3

Monday, March 17, 2025	
1:00 PM	Pre-school material
	Registration
1:30 PM	Welcome
1:40 PM	Detector physics - Simon Spannagel (DESY)
3:10 PM	Coffee break
3:30 PM	Root-Matplotlib-Tutorial - Chilufya Mwewa (FH (Forschung Hochenergiephysik)) Dominic Stafford (CMS (CMS Fachgruppe Searches))

Tuesday, March 18, 2025	
9:00 AM	Monte Carlo simulations - Juergen Reuter (DESY)
9:45 AM	Statistical methods in data analysis - Olaf Behnke (CMS (CMS Fachgruppe TOP))
10:30 AM	Coffee break
11:00 AM	Detector physics - Simon Spannagel (DESY)
12:30 PM	Lunch break
1:30 PM	Netzwerk Teilchenwelt
2:00 PM	Outreach - Uta Bilow (TU Dresden) Uta Bilow (TU Dresden)
2:30 PM	Tutorial - Konstantinos Theofilatos (National and Kapodistrian University of Athens)
3:30 PM	Coffee break
4:00 PM	Tutorial - Konstantinos Theofilatos (National and Kapodistrian University of Athens)
7:00 PM	Dinner

Wednesday, March 19, 2025	
9:00 AM	Statistical methods in data analysis - Glen Cowan
10:30 AM	Coffee break
11:00 AM	Monte Carlo simulations - Juergen Reuter (DESY)
12:30 PM	Lunch break
1:30 PM	Outreach - Uta Bilow (TU Dresden) Uta Bilow (TU Dresden)
2:00 PM	Tutorial - Konstantinos Theofilatos (National and Kapodistrian University of Athens)
3:30 PM	Coffee break
4:00 PM	Tutorial - Konstantinos Theofilatos (National and Kapodistrian University of Athens)

# Program

## Day 4-5

Thursday, March 20, 2025		Friday, March 21, 2025	
9:00 AM	<b>Tutorial</b> - Konstantinos Theofilatos (National and Kapodistrian University of Athens)	9:00 AM	<b>Introduction to machine learning</b> - Matthias Komm (DESY (Deutsches Elektronen Synchrotron))
10:30 AM	<b>Coffee break</b>	10:30 AM	<b>Coffee break</b>
11:00 AM	<b>Higgs physics</b> - Judith Katzy (ATLAS (ATLAS Top Physics))	11:00 AM	<b>Searches for physics beyond the standard model</b> - Katharina Behr (ATLAS (Fingerprint of the Vacuum))
12:30 PM	<b>Lunch break</b>	12:30 PM	<b>Lunch break</b>
1:30 PM	<b>Tutorial</b> - Konstantinos Theofilatos (National and Kapodistrian University of Athens)	1:30 PM	<b>DESY tour</b> - Jeremi Niedziela (DESY)
3:30 PM	<b>Coffee break</b>		
4:00 PM	<b>Tutorial</b> - Konstantinos Theofilatos (National and Kapodistrian University of Athens)		

# Very short introductory round

**Might just start now (if time left) and continue after the coffee break**

**Introduce yourself in < 30 seconds:**

- What is your name?
- Which city/university are you from?
- What is your status (e.g. have you already started your bachelor thesis)?