

Universität Hamburg

DER FORSCHUNG | DER LEHRE | DER BILDUNG

CLUSTER OF EXCELLENCE

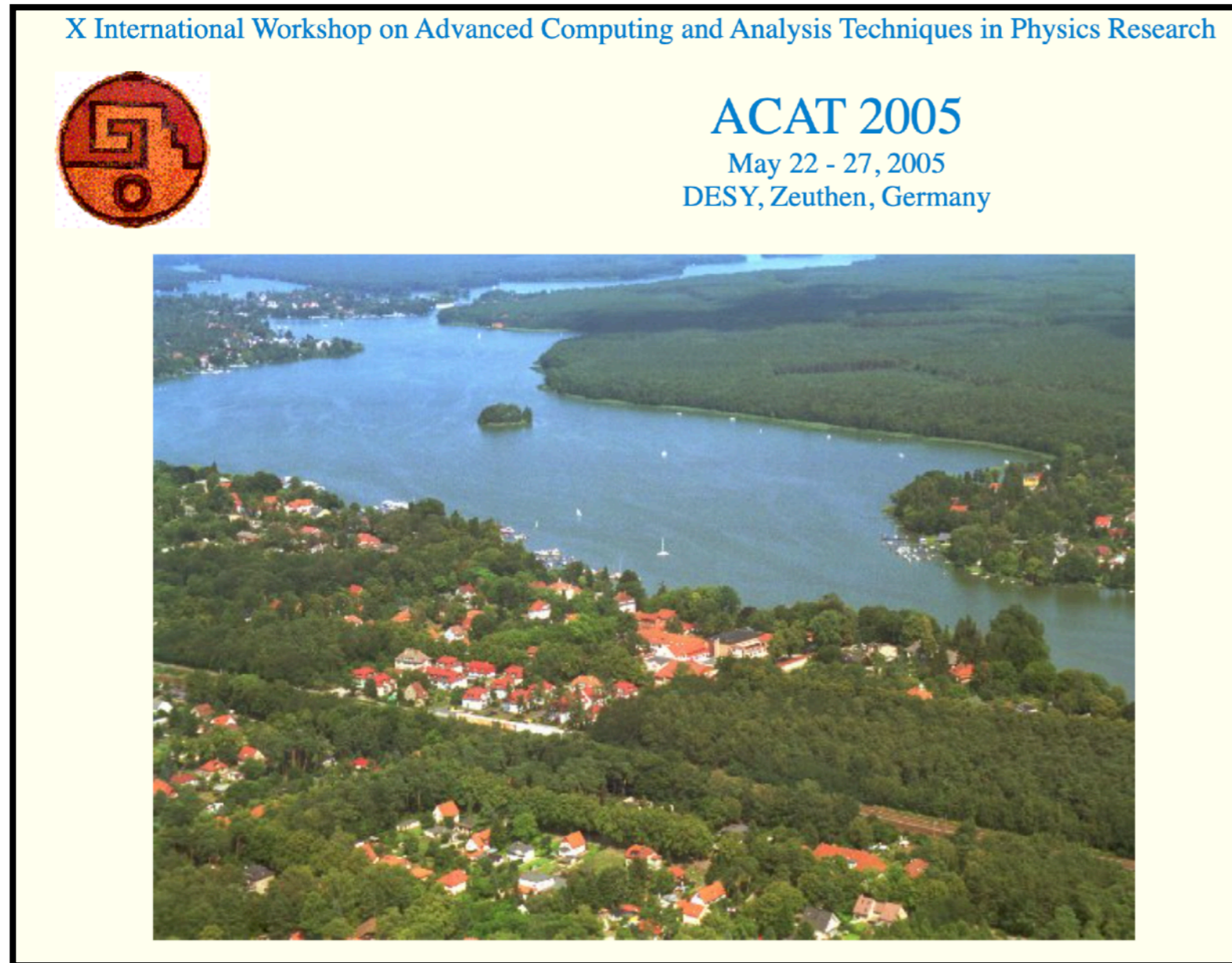
QUANTUM UNIVERSE



September 2025, ACAT in Hamburg

Contact: gregor.kasieczka@uni-hamburg.de

Previously



- Would **20 years** since the previous German ACAT
- Also 1 light-millisecond away

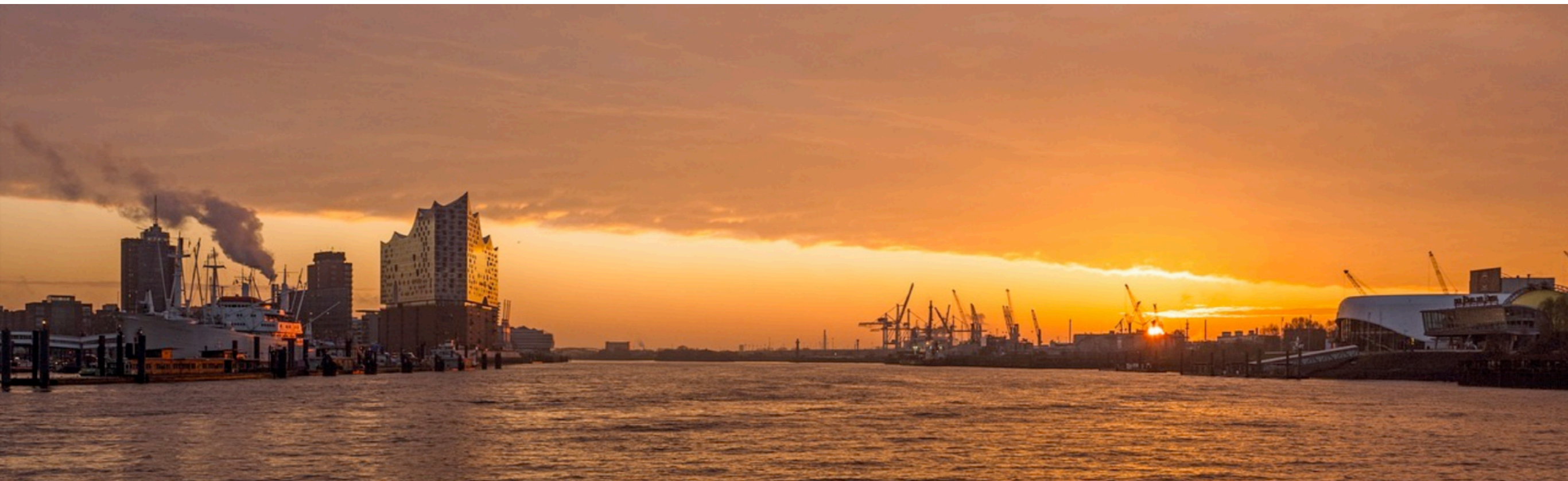
Hamburg, the city

- **Second-largest city of Germany** (6th of EU)
about 1.9 million inhabitants, 5 million in metropolitan area
- Beautifully located on the banks of rivers Elbe and Alster
water, water, water!



Hamburg, the city

- Long and proud history: “Free and Hanseatic City” always governed by local citizens
Still a standalone “Bundesland” (like Bavaria)
- Thriving and dominating harbour (3rd largest in Europe)
Germany’s “Tor zur Welt”
For centuries: multi-cultural influence and open-minded citizens
- Flourishing economy



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Hamburg, quality of life



DESY

- National research center in the **Helmholtz association** particle physics, physics with photons, accelerator research
Founded 1959, today: ~2000 employees
- Home of **E-XFEL**, Petra III, FLASH in the past: **HERA**, PETRA, DORIS
- **Largest HEP** division in D: LHC, Belle/Belle II, ILC, IceCube and CTA, Axion-like searches, test beams, detector R&D
- **Substantial scientific computing**



Hamburg University

- Founded 1919 by local citizens one of largest universities in D
- **> 40 000 students**, all disciplines humanities, law, medicine, ...
- Physics department: astro-physics, nano-science + photonics
HEP division: LHC physics, astro-particle physics, neutrino physics, detector R&D, particle physics phenomenology,
machine learning in physics



Quantum Universe

- Joint activity of UHH and DESY
- Sept 2018: extremely successful in federal “**initiative of excellence**”
- Cluster of excellence: “Quantum Universe”
Topics: string theory, particle physics, cosmology collaboration
additional 8 MEUR/year
- Currently preparing renewal application but QU will still operate in 2025 (and potentially **support ACAT**)

CLUSTER OF EXCELLENCE
QUANTUM UNIVERSE

Organisation

- Gregor **Kasieczka** (UHH), Frank **Gaede** (DESY), Andrea Bremer (UHH), Anna Hallin (UHH), Sarah Heim (DESY), Isabell Melzer-Pellmann (DESY), Hartmut Stadie (UHH) + P. Fuhrmann (DESY, TBC) + AI in Astro (UHH TBC)
- Recently history of many **successful joint conferences & workshops**:



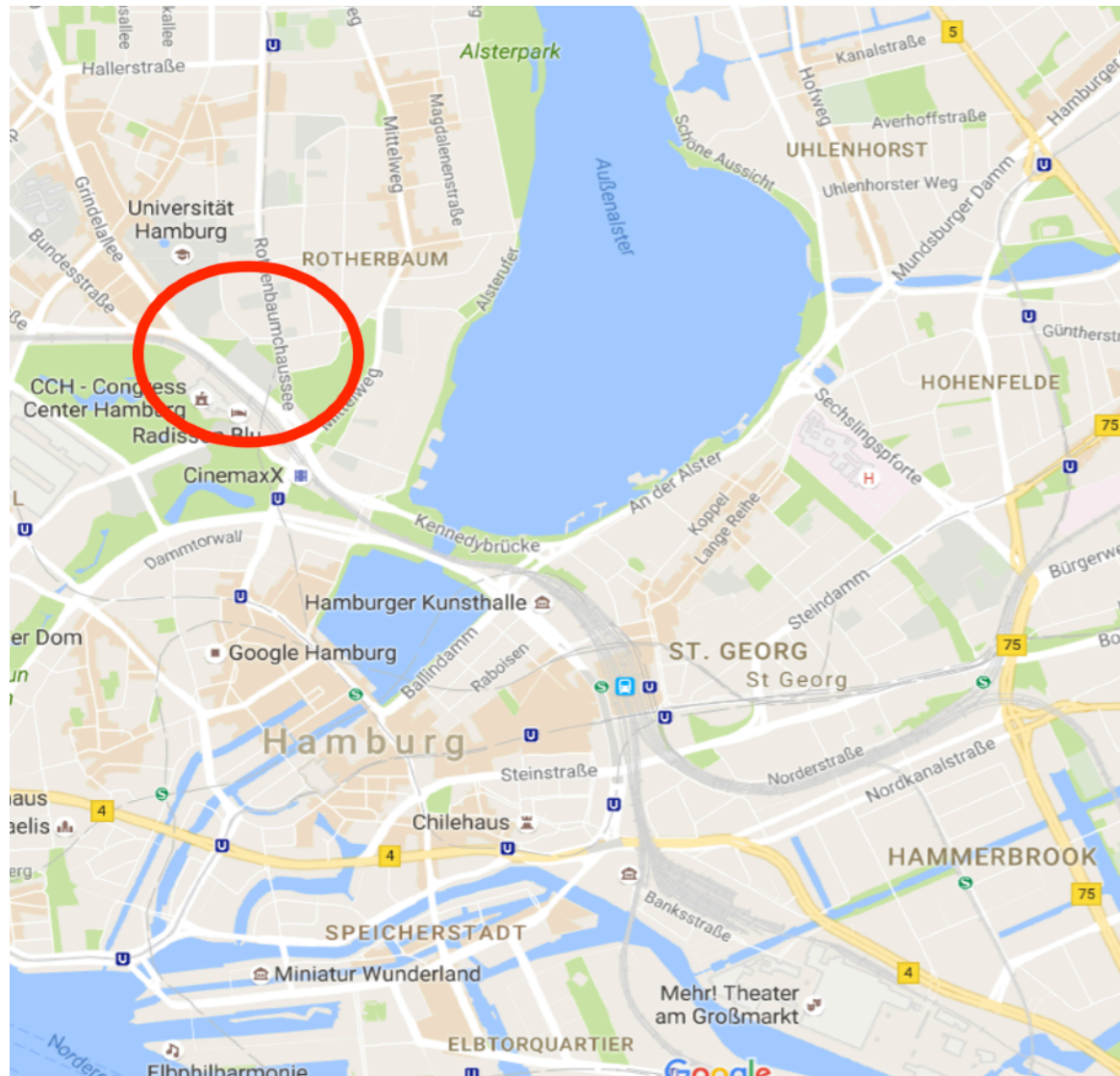
Organisation

- Including **EPS-HEP 2023**:



Location

- **Very central** conference location: Historic UHH main building
- Short distances, **excellent connectivity**
- Close to shopping, culture, attractions, bars and leisure activities



Location



Location

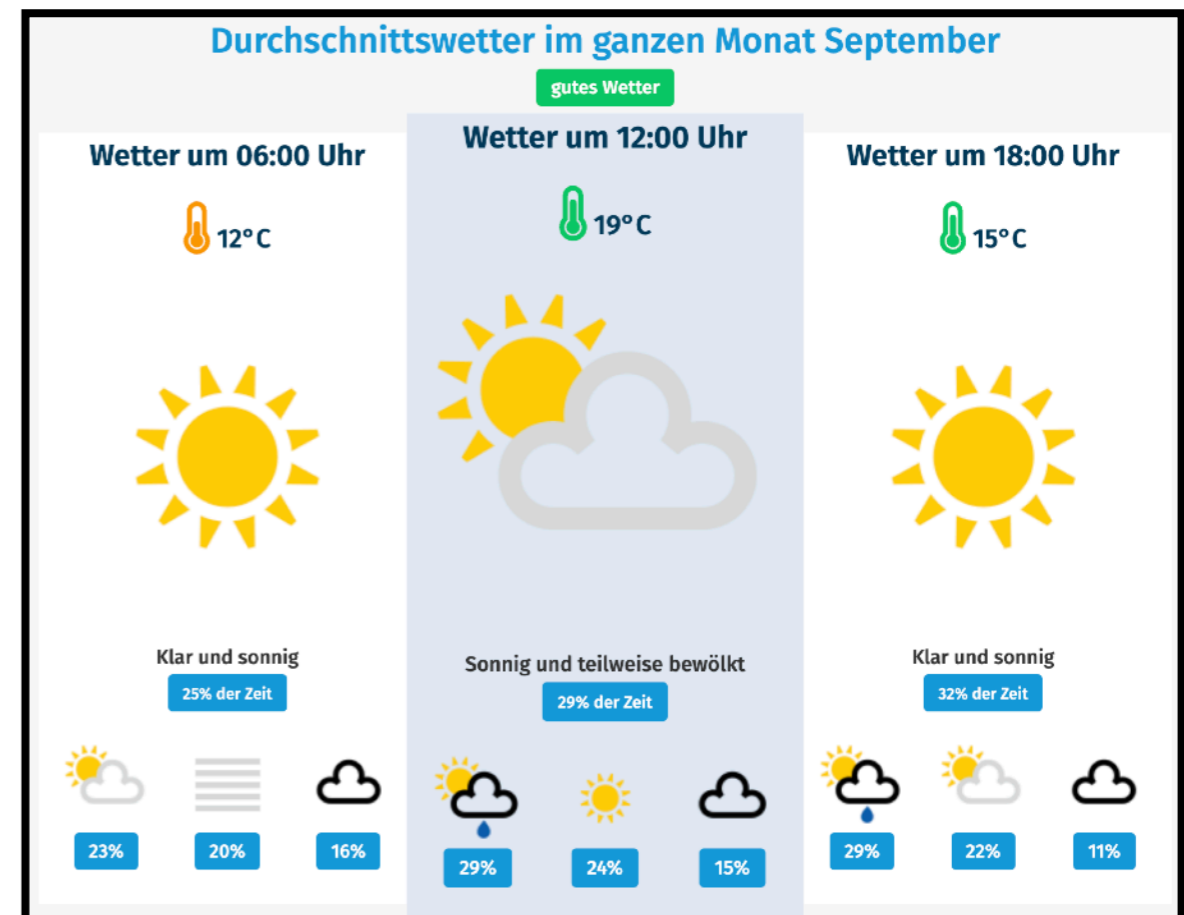
Hörsaaldetails	Kapazität
ESA 1 Hörsaal A	622
ESA 1 Hörsaal B	361
ESA 1 Hörsaal C	178
ESA 1 Hörsaal H	80
ESA 1 Hörsaal J	174
ESA 1 Hörsaal K	80
ESA 1 Hörsaal M	170

- Currently the **main building (ESA)** is **reserved**
- More lecture halls than needed for ACAT
- Could use e.g. B,C, and H - **but flexible**
- All rooms fully equipped with **projectors**, etc.
- For EPS-HEP used additional support from **DESY meeting service**; Can decide if needed



Timing

- We have reserved the main building for these slots:
1.-5.9.2025
8.-12.9.2025
22.-26.9.2025
(should decide soon)
- **September** is a great time for Hamburg — mild temperatures, good amount of sunshine



Financials

Item	Cost	#	Total
QU Cluster Support	-10000	1	-10000
Other support (e.g. ErUM, DFG, ..)	-10000	1	-10000
UHH Conference Manager / Day	1000	5	5000
Coffee Breaks / Day * Person	20	1250	25000
Catered Lunch / Day * Person	15	1250	18750
Reception / Person	50	250	12500
Dinner / Person	150	250	37500
Other costs	10	250	2500
Proceeding Publication	60	150	9000
		Sum:	90250
(250 people)		Per-participant:	361

Numbers in EUR
 Currently:
 1 EUR = 1.07 USD =
 0.96 CHF = 172 Yen =
 1.485 Won

- Rooms are free but need to pay UHH conference manager 100 EUR/hour
- As there is also local support, **conference fee = food & drinks** for participants
- Can scale up/down easily: e.g. catered lunches needed? Tour wanted?

Dinnercruise?



Hotels

- Hamburg is a major city, **plenty accommodations** available at all price scales
- Conference venue in city center: **~80 hotels** in 2km radius
- In the past: Pre-booking e.g. at Mercure at slightly reduced rate. Can consider if needed



Travel

- Hamburg airport (HAM) **well-connected to city** with public transport. Many national & international flights
- Good train connections to Germany and neighbouring countries



Summary

- **Scientifically**: Hamburg has a long-history in fundamental physics and scientific computing. Recent strong push into AI in science
- Major university & DESY collaboration:
Have the **people, resources, room, and experience** to organise an ACAT-size conference
Conference at Uni campus: Great atmosphere & in the city center
- **Beautiful international city**: Plenty options in dining, nightlife, arts, culture, and sports



Thank you for the consideration!