



PIER Helmholtz Graduate School

A Graduate Education Program
at DESY in Cooperation
with Universität Hamburg



Why doing a doctorate at DESY?

- Is one of the world's leading accelerator centres
- Excellence of DESYs Scientists
- Cooperations with excellent partners worldwide
- Exciting interdisciplinary setting
- Cooperates with industry and business
- Benefits from the metropolitan regions of the two DESY locations: Hamburg & Zeuthen
- DESY is directly involved in 4 graduate schools who offers tailored made structure, service and scientific excellence to the young scientists

DESY is directly involved in 4 graduate schools

DASHH

- Data Science in Hamburg-Helmholtz Graduate School for the Structure of Matter
- Photon Science / Accelerator Science / Particle Physics / Structural Biology / Materials Science / Reproducible Data Science
- Next application round in summer 2023
- <https://www.dashh.org>

HELIOS

- Helmholtz-Lund International Graduate School
- Atomic, Laser and Molecular Physics / Particle Physics / Nano-Bio and Nano-Physics
- <https://www.heliosgraduateschool.org/>

DESY is directly involved in 4 graduate schools

International Helmholtz-Weizmann Research School Multi-Messenger Astronomy

- DESY Zeuthen
- <https://www.multimessenger-school.de/>

PIER Helmholtz Graduate School (PHGS)

- Graduate Program at DESY in Cooperation with Universität Hamburg
- Particle & Astroparticle Physics / Photon Science / Nanoscience / Infection & Structural Biology / Accelerators / Theoretical Physics
- Membership possible all year long
- <https://graduateschool.pier-hamburg.de/>

DESY is directly involved in 4 graduate schools

- About 300 PhD students have a working contract with DESY
- Thereof about 230 with the PIER Helmholtz Graduate School (PHGS)
- PHGS: biggest Graduateschool on Campus Bahrenfeld/Hamburg
- PHGS: oldest Graduateschool at DESY – founded in 2012

PIER Helmholtz Graduate School (PHGS)

- Graduate Education Program at DESY in Cooperation with Universität Hamburg
- Located on Campus Bahrenfeld Hamburg
- Open to PhD students who have an affiliation with DESY and/or the University Hamburg who do their PhD in one or more of the following research fields:
 - Particle and Astroparticle Physics
 - Photon Science
 - Nanoscience
 - Infection and Structural Biology
 - Accelerators
 - Theoretical Physics
- 60 % international PhD students

PIER Helmholtz Graduate School

PhD programme with focus on:

- Interdisciplinary qualification
- Career planning & key skills
- Internationality & service
- + Leisure activities
- + Social events
- + Networking

→ The graduate school provides a framework for the pursuit of knowledge beyond the (narrow) focus of the thesis research.



PIER activities: PIER Graduate Week

PIER Graduate Week 2022

Interdisciplinary lecture and workshop week for PhD students

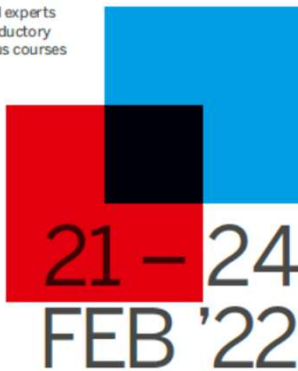
National and international experts offer a wide range of introductory lectures and in-depth focus courses in the research fields:

/ Particle & Astroparticle Physics

/ Nanoscience

/ Photon Science

/ Infection & Structural Biology



ONLINE
/ via Zoom

Programme & registration:
graduateschool.pier-hamburg.de/gradweek2022

Registration open until:
10 February 2022



- / Kartik Ayyer
MPSD Hamburg
- / Karl K. Berggren
MIT
- / Jens Bosse
Helmholtz-Polize Institut, MIRA, CS3D
- / Victor Cadarso Busto
Maastricht University
- / Irene Fernandez-Cuesta
Universität Hamburg
- / Sven Heinemeyer
IFT (UAM/CSIC), Madrid
- / Stefan Hoth
Universität Hamburg
- / Gregor Kasieczka
Universität Hamburg
- / Stephan Sylvest Keller
Technical University of Denmark
- / Jan Kosinski
EMBL, CS3D
- / Dorota Koziej
Universität Hamburg
- / Christian Löw
EMBL, CS3D
- / Daniela Rupp
ETH Zurich
- / Helmut Schitt
Paul Scherrer Institute
- / Silvan Schmid
TU Vienna
- / Holger Sondermann
DESY, CS3D
- / Maya Topf
Helmholtz-Polize Institut, UKE, CS3D
- / Sebastian Trippel
DESY, CS3D
- / Baris Tursun
Universität Hamburg
- / Ivan Vartanants
DESY-HELMHOLTZ-Polize Institut
- / Marc Vrakking
Max Stern Institute, Berlin
- / Georg Weiglein
DESY

Back in 2022 after two years of absence

140 participants

8 lecture series with 25 national & international experts

4 skills workshops



Focus Career Planning & Soft Skills (online/onsite)

Communicating Science

- Science Communication I: Blogging
- Science Communication II: Podcasts
- Science Communication III: Science Slam
- Science Communication IV: (YouTube) Videos

Career Development

- How to apply successfully
- Career Orientation for PhD Students

Coordination and Management

- Good Scientific Practice
- Project Management
- Scientific Writing
- Convincing Scientific Presentations

Software

- Python Basics
- Python Advanced
- Introduction to Machine Learning with Python
- Quantum Computing

1st PIER Science Slam

Young scientists compete in an entertaining matter on May the 4th at 6pm in the DESY Lecture Hall!



Join our 1st PIER Science Slam!

- Young scientists explain their research in short 10-minute-talks
- Who can win the audience over their research topic?!
- Listen to funny talks, interesting stories or peculiar facts about science
- Learn from experienced and trained Science Slammers



Sign up here!

Philipp Gadow

- experienced Science Slammer who performed on stage numerous times
- researcher in elementary particle physics at DESY
- member of the ATLAS experiment
- searching for exotic phenomena in proton-proton collisions

Science Communication III: Science Slam



- No previous knowledge required
- Approach a talk for a science slam
- Convey your research problem and why you find it interesting

- Receive guidance and feedback from experienced science slam participants
- Perform your slam during the workshop
- Get on the big stage! (if you want)



You would like to get on stage?
Join our next Science Communication workshop!

4 - 27 April 2022 by Philipp Gadow

Wie findet man dunkle Materie? (Science Slam)

Philipp Gadow
Quantum Universe (UHH)



Contact:
Theresa Schwabbecker
Public Coordinator
PIER Education Platform



Focus Internationality & Service

- Buddy programme for international PhD students
- German and English language courses
- Assistance with housing and visa issues
- Travel grants for research trips
- PhD Social hour, BBQs, Language Cafe
- One-stop-office & bridge between DESY and UHH



Some general facts on doing the doctorate at DESY

- PhD positions are funded through a working contract e.g. with DESY or a scholarship
- Duration working contract at DESY: approx. 3 - 3.5 years
- Every doctoral candidate has to be enrolled at an university (e.g. Universität Hamburg, Humboldt Universität Berlin etc.)
- Only universities can award the doctorate
- No tuition fees

How to apply for a PhD position at DESY

- Use your contacts from the DESY Summer Students Programme
- Look for open positions on the DESY website or the websites of your favourite research teams
- Contact the respective group leaders
- General information on the German education system: DAAD (www.daad.de) (German Academic exchange Service)



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Thank you very much for your attention

We are looking forward to seeing you
again as one of our PhD students ...

graduateschool.pier-hamburg.de

<https://www.facebook.com/PIERHamburg>

<https://twitter.com/PIERCampus>

<https://www.linkedin.com/company/70375638/admin/>