

ErUM-Data-Hub & DIG-UM present

Fast & Efficient Python Programming School

19. – 22. August 2024

Welcome!



GEFÖRDERT VOM



Bundesministerium
für Bildung
und Forschung

Welcome!

- **19 – 22 August 2024 (Monday - Thursday)**
- <https://indico.desy.de/event/40133/>

Local Organisation & Program by ErUM-Data-Hub:

Jan, Bürger, Peter Fackeldey, Benjamin Fischer, Stefan Fröse, Martin Erdmann, Ulla Lardinoix, Judith Steinfeld, Angela Warkentin

Any Questions?


- Are you happy with your accomodation?
- angela.warkentin@erumdatahub.de
- +49 241 8027490 (Will be redirected to my mobile phone during school)

ERUM-DATA-HUB & DIG-UM PRESENT

FAST AND EFFICIENT python[™] COMPUTING SCHOOL

NEW

LEARN ABOUT

- > “efficient python programming”
- > “accelerator optimised programming”
- > “GPU programming” 



19.08.24 - 22.08.24

Erholungsgesellschaft

Aachen

Reihstr. 13
52062 Aachen



> Including a Group Challenge



Contact & Information:

www.erumdatahub.de

info@erumdatahub.de

<https://indico.desy.de/event/40133/>



FOLLOW US



Your are part of ErUM: Research on Universe and Matter



Bundesministerium
für Bildung
und Forschung

Astroparticle Physics

Elementary Particles Physics

Research with neutrons

Research with nuclear probes and ion beams

Research with synchrotron radiation

German Observatory Council

Accelerator Physics

Hadron and nuclear physics

Related sciences and industry



Lectures & Hands-On Sessions: your time to learn!

1. Setting the Scene

Jim Pivarski, Princeton University

2. Efficient Python Programming

Vassil Vassilev, Princeton University

Tutor Aaron Jomy

3. Accelerator Optimised Programming

Jonas Eschle, Syracuse University

4. GPU Programming

Alessandro Scarabotto, TU Dortmund University

Tutor Nicole Schulte

5. Programming & Sustainability

Pardis Niknejadi, DESY

Feel free to ask questions anytime!



Challenge: your time to shine!

- Group Challenge
- Based on lecture contents
- Task will be given on Wednesday
- **Spoiler: you could break a world record!**



All Information & Materials on Indico: <https://indico.desy.de/event/40133/>

- Overview
- Timetable
- Contribution List
- Registration
- Payment
- Venue & Travel
- Recommendations in Aachen
- Prerequisites
- Accommodation
- Code of Conduct
- Organisation
- Data Privacy Policy

Contact

✉ angela.warkentin@erum...

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Timetable

< **Mon 19/08** Tue 20/08 Wed 21/08 Thu 22/08 All days >

Print PDF Full screen Detailed view Filter

Session legend

Opening Talk Welcome

16:00

17:00

18:00

Registration & Reception

Erholungs-Gesellschaft Aachen 1837 16:30 - 17:30

Welcome: Introduction

Erholungs-Gesellschaft Aachen 1837 17:30 - 18:00

Setting the Scene

Internet connection: !!!
Password = !!!



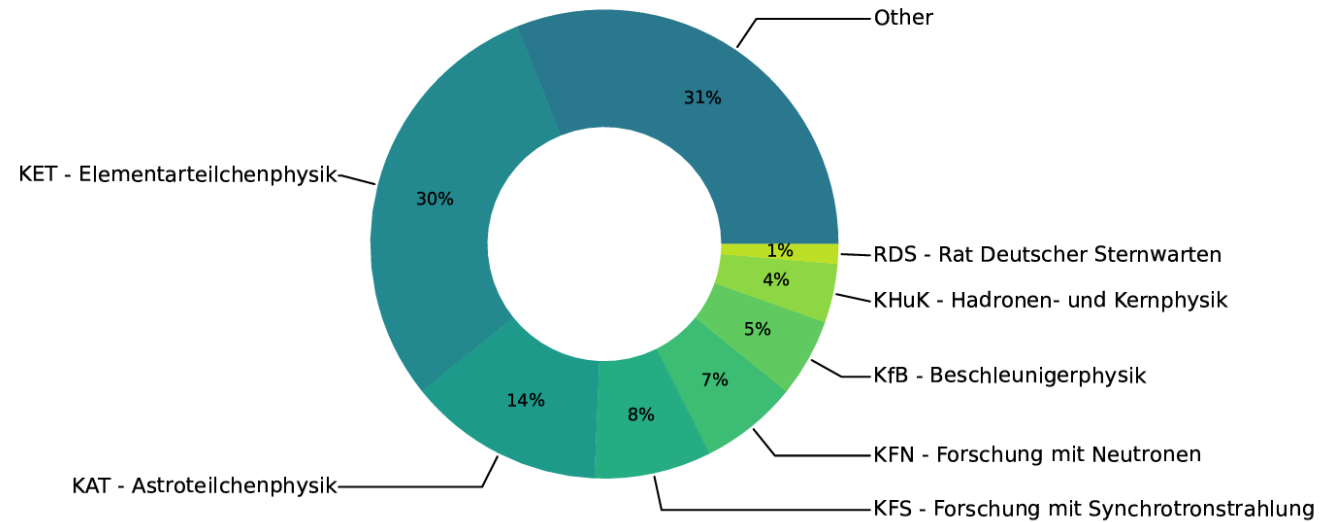
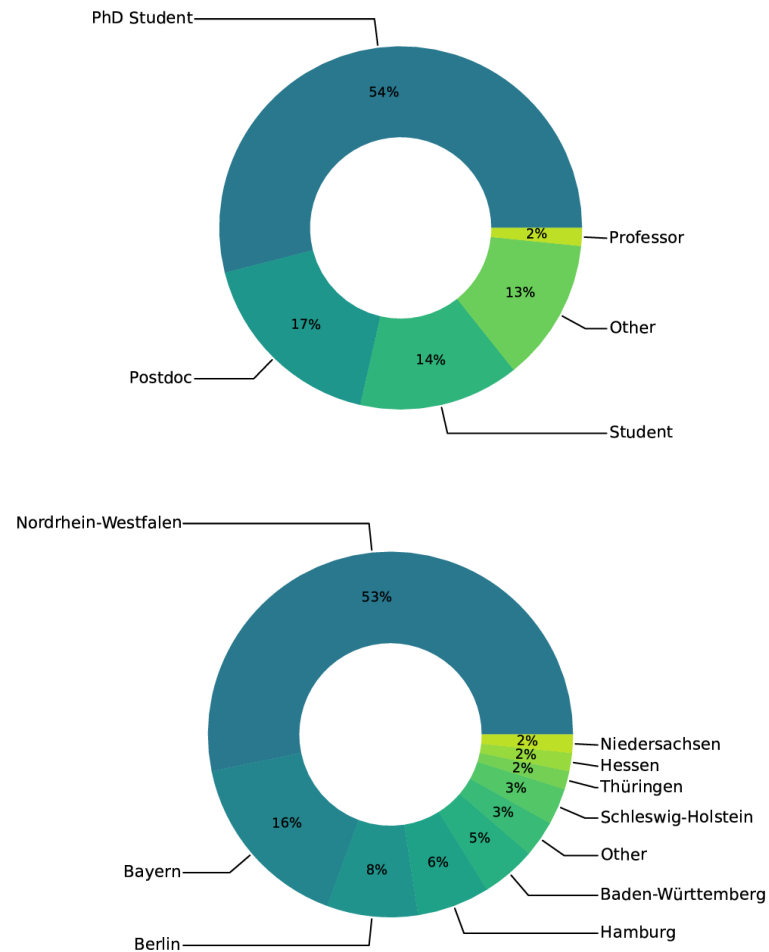
Spare Time

- All meals & coffee breaks are included for you
- Check out the interactive App „Das Teilchenuniversum“
- **Join the (P)Hub-Quiz on Tuesday:**
 - Drinks are on us
 - Sign up with Teams of 3 – 6:
https://docs.google.com/spreadsheets/d/1_CTzW8oGwLfNkepyQgw7K7Cp1X_xN0AsXiTlacM-ils/edit?usp=sharing
 - Best Group-Name gets 3 extra points

Follow us on Instagram until Friday for a chance to win a **Hub-Mug**.



We are a mixed group with different perspectives

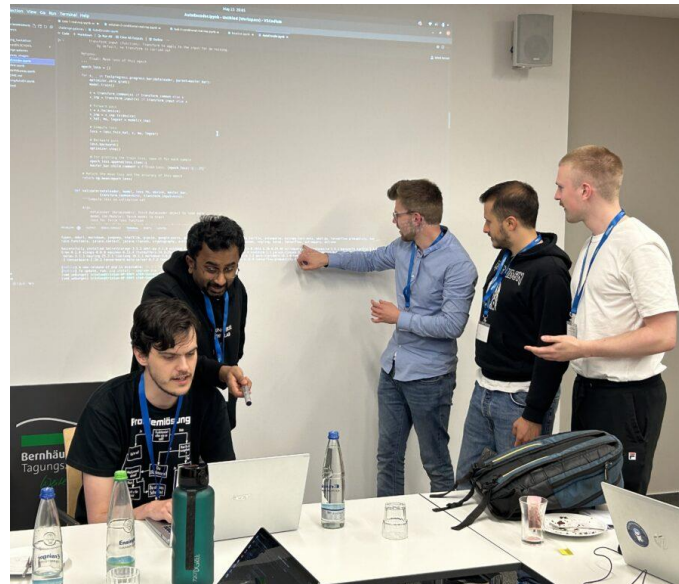


KET = Elementary Particles Physics
KAT = Astroparticle Physics
KFS = Research with synchrotron radiation
KFN = Research with neutrons

KfB = Accelerator Physics
KHuK = Hadron and nuclear physics
RDS = German Observatory Council



Get connected: use this opportunity to make new contacts!



Monday

Tuesday

Wednesday

Thursday

	8:30	Coffee		Coffee		Coffee
	9:00	Efficient Python Programming: Lecture		GPU Programming: Lecture		Challenge
	10:30	Coffee		Coffee		
	11:00	Efficient Python Programming: Hands-On		GPU Programming: Hands-On	11:00	Coffee
	11:15					Challenge Presentations, Award Ceremony & Farewell
	13:00	Lunch		Group Picture & Lunch		
					13:30	Lunch
	14:30	Accelerator Optimised Programming: Lecture	15:00	Sustainability & Programming		
	16:00	Coffee		Challenge		
16:30	Registration			Coffee		
17:30	Welcome	Accelerator Optimised Programming: Hands-On		Challenge		
18:00	Setting the Scene: Opening Talk			Dinner		
19:30	Welcome Dinner	18:30	Dinner			
		19:15	Walk through Aachen			
		20:00	Pub Quiz			Challenge (optional working time)