# **ErUM-Data-Hub**

The Networking and Transfer Office serving Digital Transformation in Research on Universe and Matter in Germany

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Federal Ministry of Education and Research







## **ErUM-Data**

- ErUM-Data is a German <u>funding plan</u> to promote the digital transformation in the research fields universe and matter (ErUM)
- Funded by the German government (120M € for 10y)
- The gained knowledge will play a key role in many future (day-to-day) applications: Research, AI, medicine, ...
- In total 20.000 scientists are part of the ErUM-Communities



→ Central Office to help realizing these goals: ErUM-Data-Hub



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Federal Ministry

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## The ErUM-Data-Hub Project



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#### Team

#### Education

## **ErUM-Data-Hub**

#### Outreach

Transfer

## ErUM-Data-Hub: Team

- Founded in 2022
- Team of 5 (currently):
  - Project lead: Prof. Dr. Martin Erdmann
  - Team lead: Angela Warkentin
  - Science Communication: Judith Steinfeld
  - Technical Support: Benjamin Fischer
  - Scientific Advisor: Peter Fackeldey (me)
- Based in Aachen (Germany)
- Contact: info@erumdatahub.de



Peter Fackeldey

### Team





## Deep Learning Schools

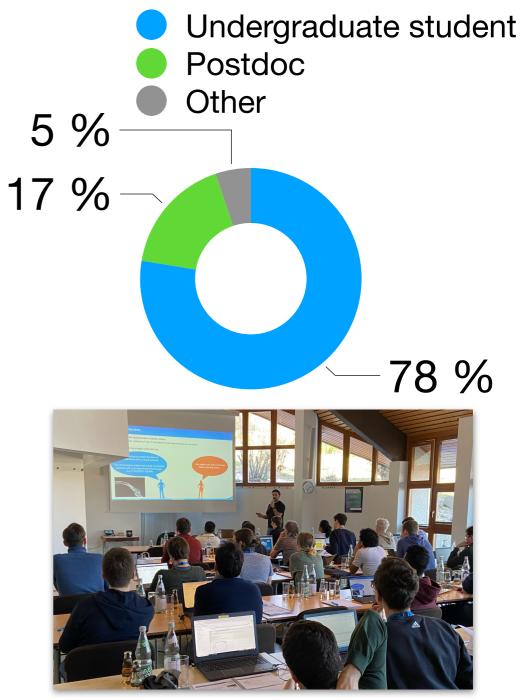


Peter Fackeldey

## Education

Advanced / Basics -

- Audience: (PhD) Students
- 4-5 days @hotel
- ~30-50 participants
- 4 Lectures + Tutorials (90')
- Group Challenge
- 3x year



→ training students to *use* Deep Learning

## Train-the-Trainer

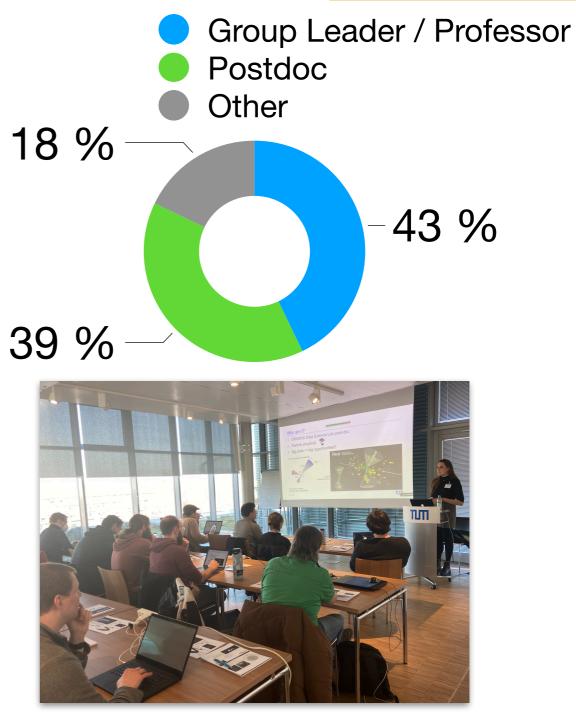


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### Education

Advanced / Basics <

- Audience: Post-docs, Professors, ...
- 2 days @university
- ~30 participants
- 4 Lectures + Tutorials
- 2x year

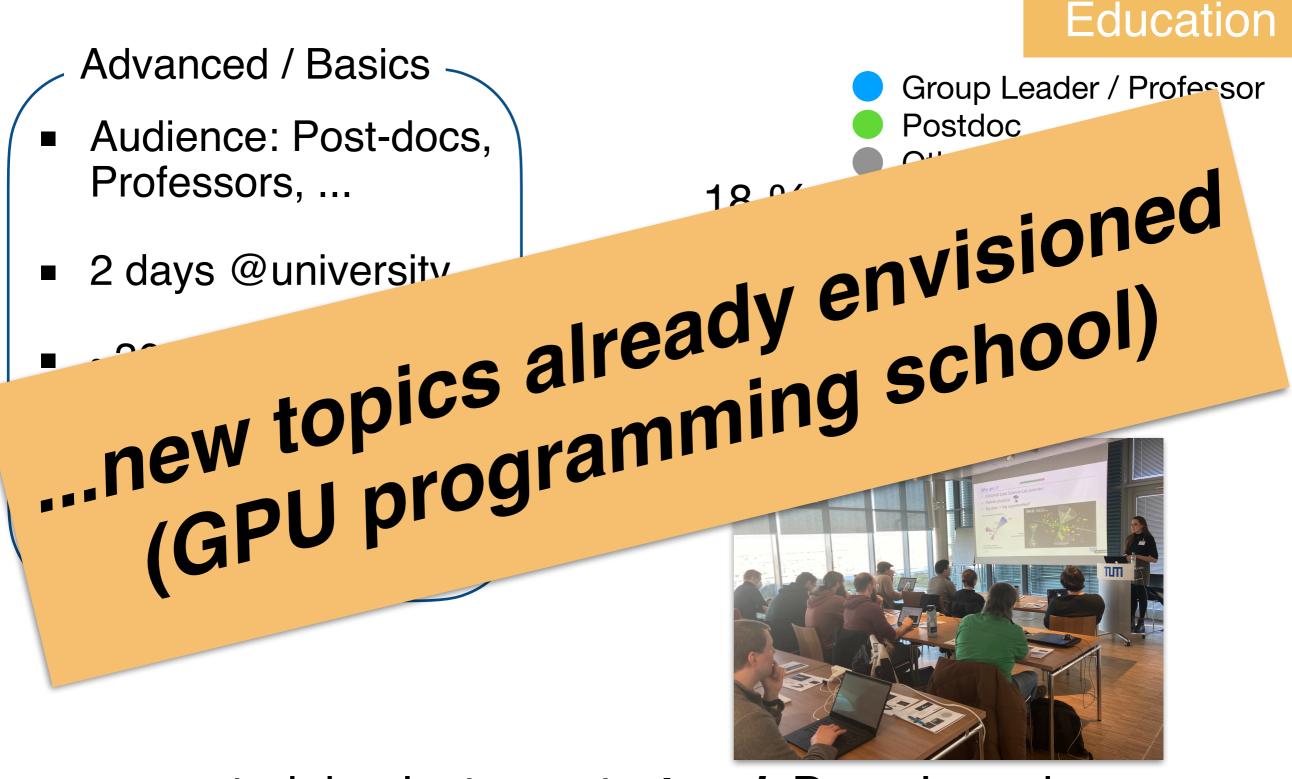


 $\rightarrow$  training lecturers to *teach* Deep Learning

## Train-the-Trainer







→ training lecturers to *teach* Deep Learning

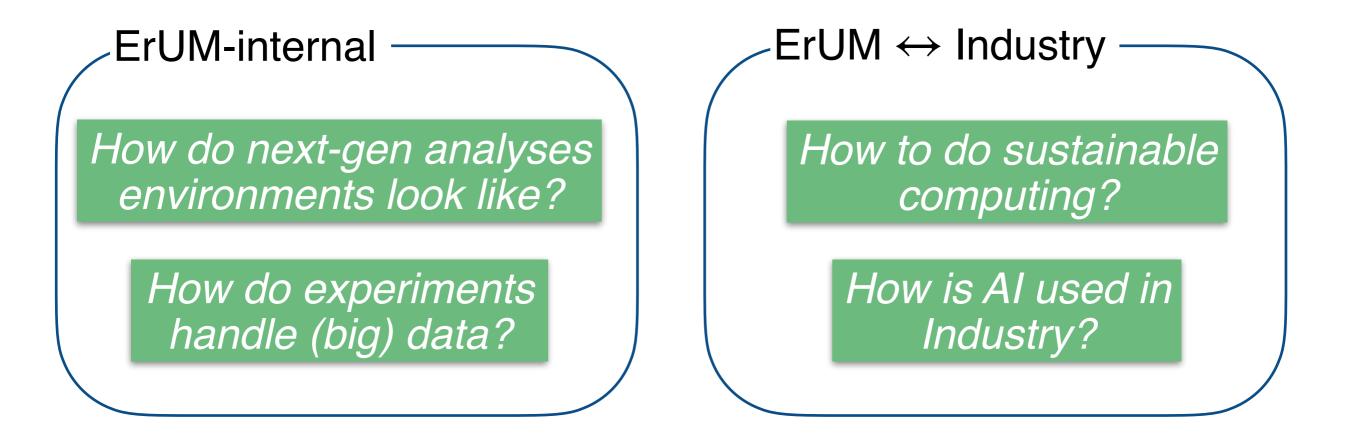
## Transfer through workshops



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Transfer

- Transfer knowledge between communities
- Isolate issues that are important to communities

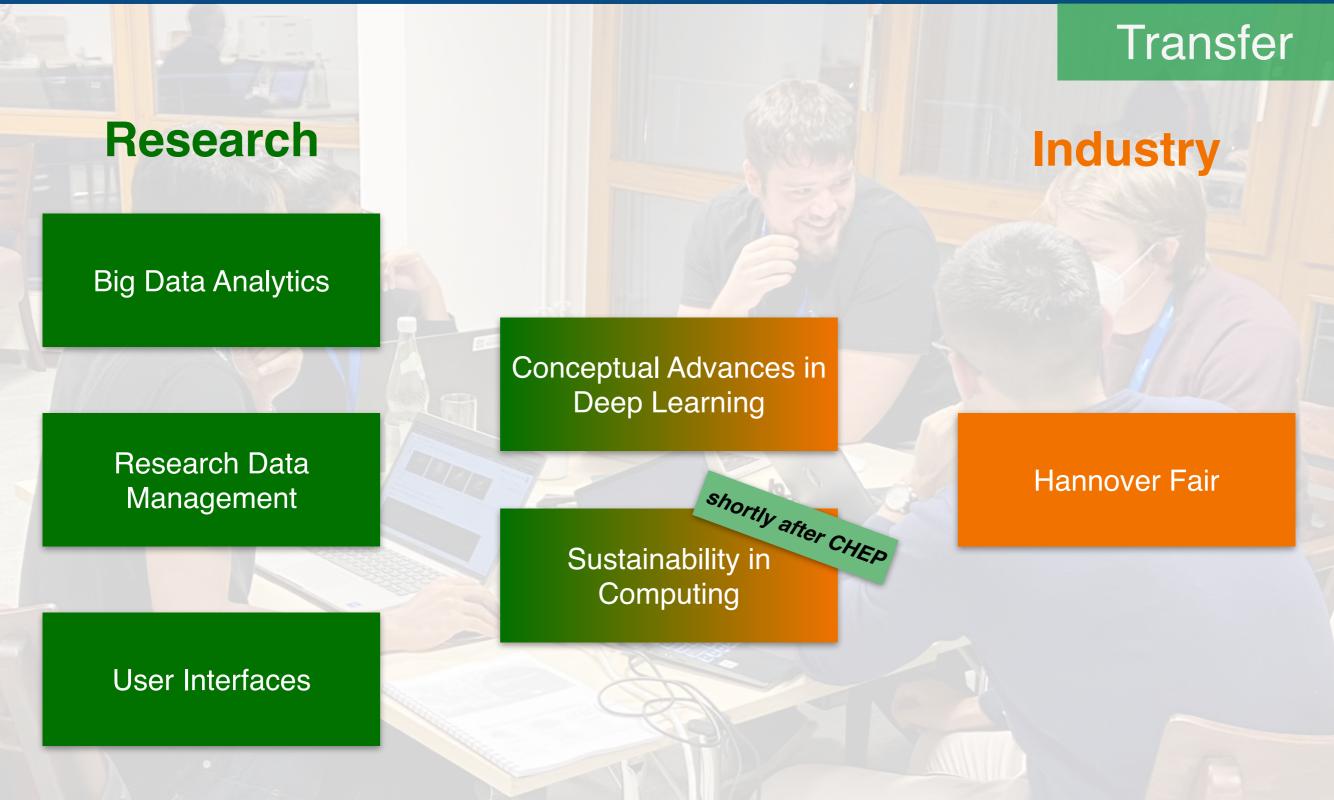


→ Workshops (with peer-reviewed strategy papers)

## Workshops: Overview



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Workshops in research (focus) and industry

## Workshops: Overview



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### Workshops in research (focus Niclas Eich und 32 weitere Personen

#### ErUM scientists prove excellence at #HM23

Two #ErUM scientists demonstrated their outstanding expertise at this year's #Hannovermesse. Simone Mender and Stefan Fröse made a very special impression at the #aws partner matchmaking and were awarded for their idea to improve current AI solutions for gamma-ray astronomy using aws Ultraclusters.

Congratulations! Thank you for accepting the ErUM-Data-Hub's invitation to the fair and for representing the special skills that arise in the research on universe and matter in such a great way!

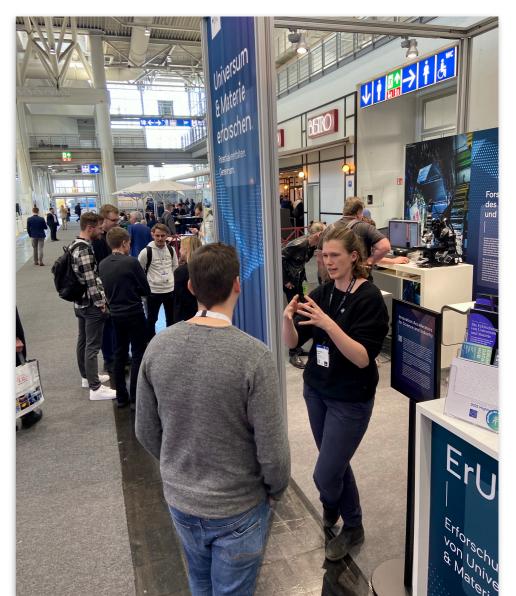
#### Übersetzung anzeigen



## ErUM-Data-Hub: Outreach

- Web presence: <u>erumdatahub.de</u>
- Established network between outreach responsibles
- Lively discussions with broad public Hannover Fair
- We're active on:
  - erumdatahub.de/blog (Blog)
  - <u>@ErUMDataHub</u>
  - <u>@ErUM-Data-Hub</u>







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- ErUM-Data-Hub helps to facilitate the ErUM-Data funding plan
- 3+2 schools, 7+2 workshops (~300 participants)
- Exhibition stand at the Hannover Fair 2023
- Why should you care?
  - Gained knowledge will be brought into *your* experiments
  - Many new job opportunities

