### ErUM-Data-Hub & DIG-UM present

# Deep Learning School "Basic Concepts"

Meinerzhagen

07.08. - 10.08.2023



GEFÖRDERT VOM



## Welcome!

07.08. - 10.08.2023

https://indico.desy.de/event/37477/



#### **Local Organisation & Program by ErUM-Data-Hub:**

Martin Erdmann, Angela Warkentin, Peter Fackeldey, Judith Steinfeld, Stefan Fröse, Benjamin Fischer

#### **ErUM:**

BMBF Rahmenprogramm **ErUM** = Erforschung von Universum und Materie
BMBF Framework programme **ErUM** = Research on Universe and Matter
BMBF Action Plan **ErUM-Data** = Digital Transformation in ErUM



## You can look forward to lectures, hands-on sessions and a group challenge

#### **Lectures:**

**Dr. Karim El Morabit:** 

**Neural Network Building Blocks** 

**Dr. Marcel Rieger:** 

Mastering Model Building

**Thorsten Buss:** 

Convolutional Neural Networks

**Peter Fackeldey:** 

Beyond the Basics

**Material**:

https://indico.desy.de/event/37477/







## Hands-On Sessions & Challenge

#### **Hands-On Sessions:**

- We have three tutors here
- Tobias Quadfasel
- Ana Alves Andrade
- Cedric Ewen
- Feel free to ask questions anytime!





#### **Challenge:**

- Prepared by Stefan Fröse
- The group challenge will be given on Wednesday afternoon
- You will present your results on Thursday
- More Info on Wednesday



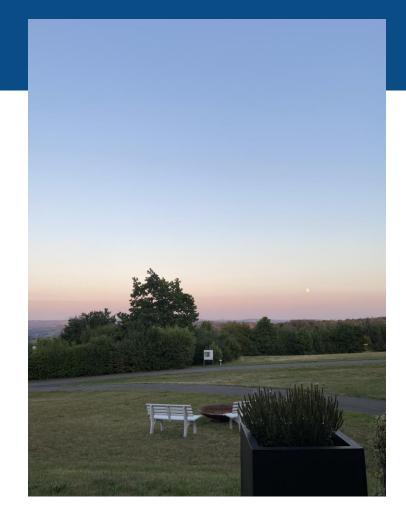




## General Information

- Wifi in the conference room:
  - Gigacube 585B for the **front rows** (PW: **2eE26aEBy3E6Q96d**)
  - Nordhelle [5G] LTE-2 for the middle rows
  - Nordhelle [5G] LTE-4 for the back rows
- Water and apple juice in the lecture hall and at the meals are included for you
- During the school you can reach the organization team at the mobile number +49 175 3259293

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





## Leisure Activities

#### Bar:

• Open until about 11 pm

#### Free:

- Table football and billiards
- Swimming and fitness

#### Buy access at the info counter:

- Disc golf
- Bowling (10€/hour with up to 10 persons)

#### **Social evening:**

- Join our Pub Quiz on Tuesday (Drinks are on us)
- On Tuesday we will also open the bowling alley for you

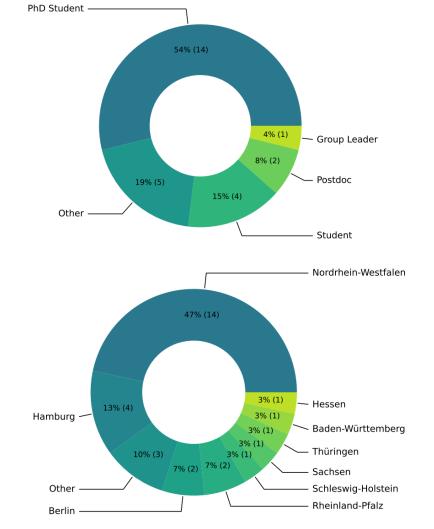


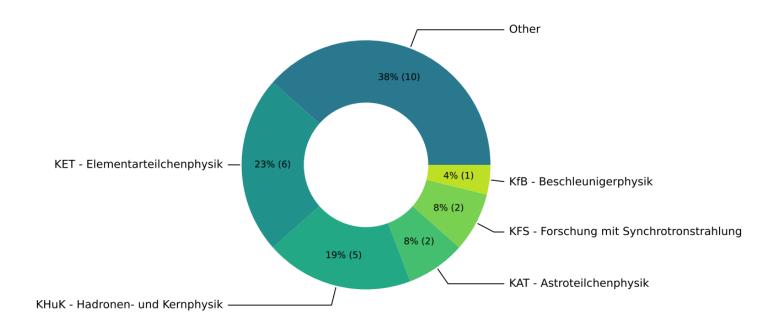






## We are a mixed group with different perspectives





#### Fill out your networking profiles and get to know each other:

https://docs.google.com/presentation/d/13zpe1SqG8m0gxspDZN p6FOSc11uv-Vf145VB6pUIfhQ/edit?usp=sharing (Link @ Indico)



**Monday Tuesday** 7:00 Breakfast 9:00 Libraries **Neural Network Building Blocks** 10:30 Coffee 11:00 Hands-On **Neural Network Building Blocks** 12:30 Lunch 13:30 14:30 Lecture **Mastering Model** Building 16:00 Coffee 16:30 Hands-on **Mastering Model** Building 18:00 Supper Supper 19:00 19:30 Welcome Lecture Pub Quiz & Bowling **Neural Network Building Blocks** 21:00

#### Wednesday

Breakfast

#### Lecture

Convolutional Neural Networks

Coffee

#### Hands-On

Convolutional Neural Networks

Lunch

#### Challenge

Introduction & Start

Coffee

Challenge

Supper

#### **Thursday**

Breakfast

Challenge

Coffee

Challenge

**Presentations** 

Wrap Up:

Beyond the Basics Award Ceremony & Farewell

Lunch