

HELMHOLTZ **AI** | ARTIFICIAL INTELLIGENCE
COOPERATION UNIT



HELMHOLTZ AI

HEALTH ROADSHOW

www.helmholtz.ai

Today's agenda

❖ **9:00 -> 10:00 General Session**

- Part 1: Introduction to Helmholtz AI
- Part 2: Meet the Consultant Team for Health
- Q&A Session

Break

❖ **1-to-1 Consultancy slots (private)**

- 10:30-11:00 Department of Chemical Biology
- 11:00-11:30 Nanoscale Infection Biology
- 11:30-12:00 Structure and Function of Proteins



Part 1 - Dr Marie Piraud

Introduction to Helmholtz AI

www.helmholtz.ai

The six Research Fields

... of the Helmholtz Association

ENERGY



EARTH AND
ENVIRONMENT



HEALTH



AERONAUTICS,
SPACE AND
TRANSPORT



MATTER



KEY
TECHNOLOGIES
(IN THE FUTURE:
INFORMATION)



The six Research Fields

... of the Helmholtz Association

ENERGY

EARTH AND ENVIRONMENT

HEALTH

AERONAUTICS, SPACE AND TRANSPORT

MATTER

KEY TECHNOLOGIES (IN THE FUTURE: INFORMATION)

Everyone has BIG data.

Imaging

-omics

Health records

Helmholtz AI

An Helmholtz Incubator Information and Data Science Platform



HELMHOLTZ AI | ARTIFICIAL INTELLIGENCE COOPERATION UNIT

Research,
Funding & Support





MISSION

Maximise research impact by
democratising access to AI



Key facts:

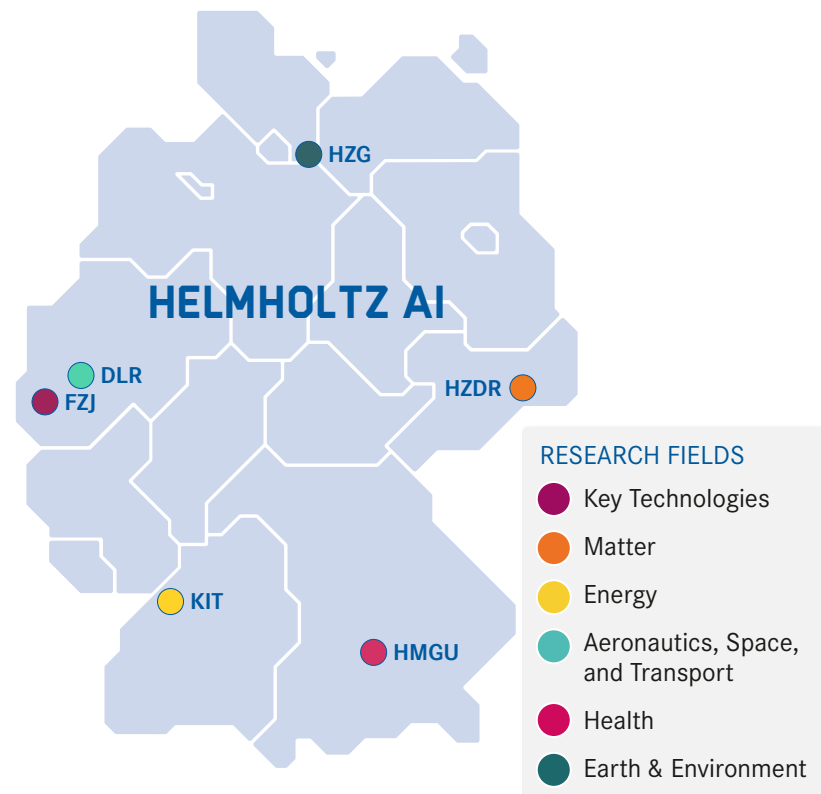
Launched mid 2019
12M€ per year
Central unit
+ 5 local units



Helmholtz AI

Mission: Democratising Access to AI

- ❖ **Interdisciplinary** platform for innovative research in AI
- ❖ Compiles develops and fosters **applied AI** methods nationwide across all **Helmholtz Centers**
- ❖ Aims to reach **international leadership** in applied AI



Helmholtz AI

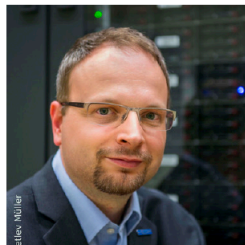
Steering Board



Fabian Theis
SD, HMGU



Frank Jenko
MPI



Guido Juckeland
HZDR



Judith Katzy
DESY



Andreas Kosmider
HGF



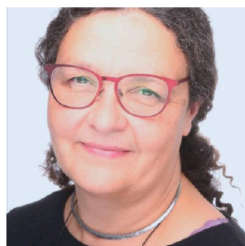
Lars Mehwald
HGF



Ralf Mikut
KIT



Morris Riedel
FZJ



Corina Schrum
HZG



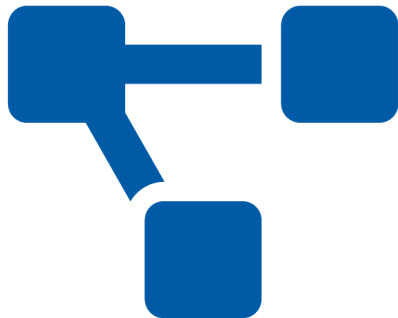
Oliver Stegle
DKFZ



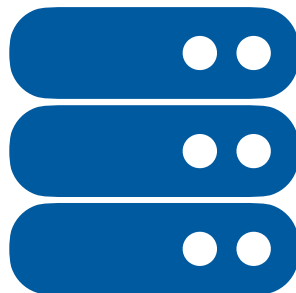
Frederik Tilmann
GFZ



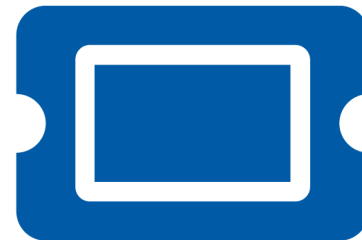
Xiaoxang Zhu
DLR



Projects



HAICORE

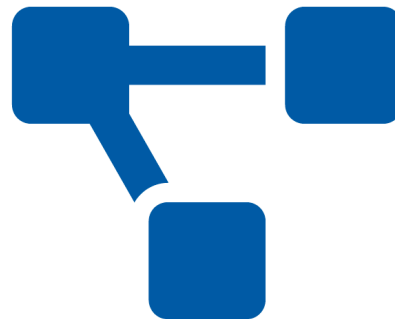


Vouchers

Projects: Research on novel AI Methods and Applications

- ❖ **High risk, high gain** AI research
- ❖ At least **two Helmholtz Centers**, external partners possible
- ❖ **Duration** 1-3 years (usually 2)
- ❖ **50:50 matched** funding
- ❖ Up to **200.000 €**
- ❖ **Annual call**, expected for next fall

More information at www.helmholtz.ai



- ❖ **GPU-accelerated HPC** systems
- ❖ Support via consultants
 - Instant use
 - **Light-weight projects** (5,000 GPU hours)
- ❖ Automatic access for Helmholtz AI (e.g. Vouchers, Projects)
- ❖ Easy [application process](#)



- ❖ **Collaborative** work between **Research group** and **Consultant group**
- ❖ Duration: **2 weeks - 6 months**
- ❖ **Free of charge**, conditioned on availability of consultants
- ❖ **Easy application**, fast assignment process



- ❖ **Exploration** vouchers (2 weeks)
 - Brainstorming on AI approaches
 - Feasibility on your data
 - Technology advice
- ❖ **Realisation** vouchers (up to 6 months)
 - Method development
 - Implementation of pipelines
 - Optimization of existing code
 - Application on your data
- ❖ Joint **publication policy** (for major contributions, follows DFG guidelines)



- ❖ **Centralized [web-based system](#)**
 - Login with Helmholtz Center e-mail address
 - Minimal form
 - Short abstract (>100 characters)
- ❖ **Assignment process**
 - Answer (<3 weeks)
 - Handled by responsible unit
 - Can be attributed to another unit
 - We always give feedback and help!

Helmholtz AI Voucher System

Type of Voucher*

Please select

Title*

Abstract / Summary*

Please provide an abstract or summary of your voucher proposal here. In addition to the abstract, you may also upload a PDF file containing supporting information.

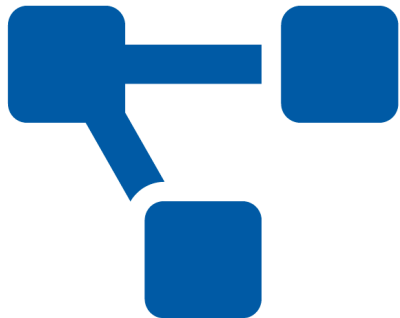
Would you like to upload a PDF file in addition to the abstract/summary?*

Please select

Should you wish to provide more information such as a more comprehensive description of the project, figures or tables, you can upload a PDF file.

Upload supporting file (only PDF format, size < 5MB)

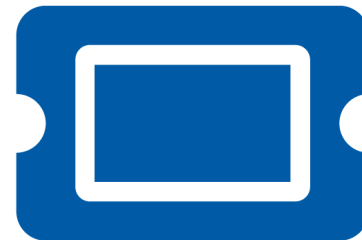
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Projects



HAICORE



Vouchers

Helmholtz AI

Save the date: 14-15 April 2021

HELMHOLTZ AI VIRTUAL CONFERENCE 2021



@helmholtz_ai



www.helmholtz.ai



Helmholtz AI

Want to give it a try?



Voucher Application

consultant-
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muenchen.de

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