

Exchange on Open Science & Software/Data Management at HZDR

March 20th, 2024



Agenda

09:15 → 09:25 **Welcome**

Sprecher: Guido Juckeland (Helmholtz-Zentrum Dresden-Rossendorf), Juergen Grzondziel (HZDR)

09:25 → 10:30 **Exchange on AI und Software Management**

HIFIS, HERMES, HELMHOLTZ AI, EVERSE

Sprecher: David Pape (Helmholtz-Zentrum Dresden - Rossendorf e.V.), Oliver Knodel (Helmholtz-Zentrum Dresden-Rossendorf), Sebastian Starke (HZDR), Till Korten, Tobias Huste (Helmholtz-Zentrum Dresden-Rossendorf)

10:30 → 10:45

Coffee/Tea

10:45 → 11:30 **Exchange on Electronic Lab Notebook**

MediaWiki

Sprecher: Thomas Gruber (HZDR)

11:30 → 12:30

Lunch

12:30 → 14:00 **Visit to the ELBE facilities and the Rechenzentrum**

Sprecher: Iven Holstein (HZDR), Stefan Mueller (Helmholtz-Zentrum Dresden-Rossendorf)

14:00 → 15:15 **Exchange on Open Science & Data Management**

EOSC, PANOSC, SCICAT, RODARE (INVENIO), ROBIS

Sprecher: David Pape (Helmholtz-Zentrum Dresden - Rossendorf e.V.), Kerstin Henrion, Maik Fiedler (HZDR), Oliver Knodel (Helmholtz-Zentrum Dresden-Rossendorf)

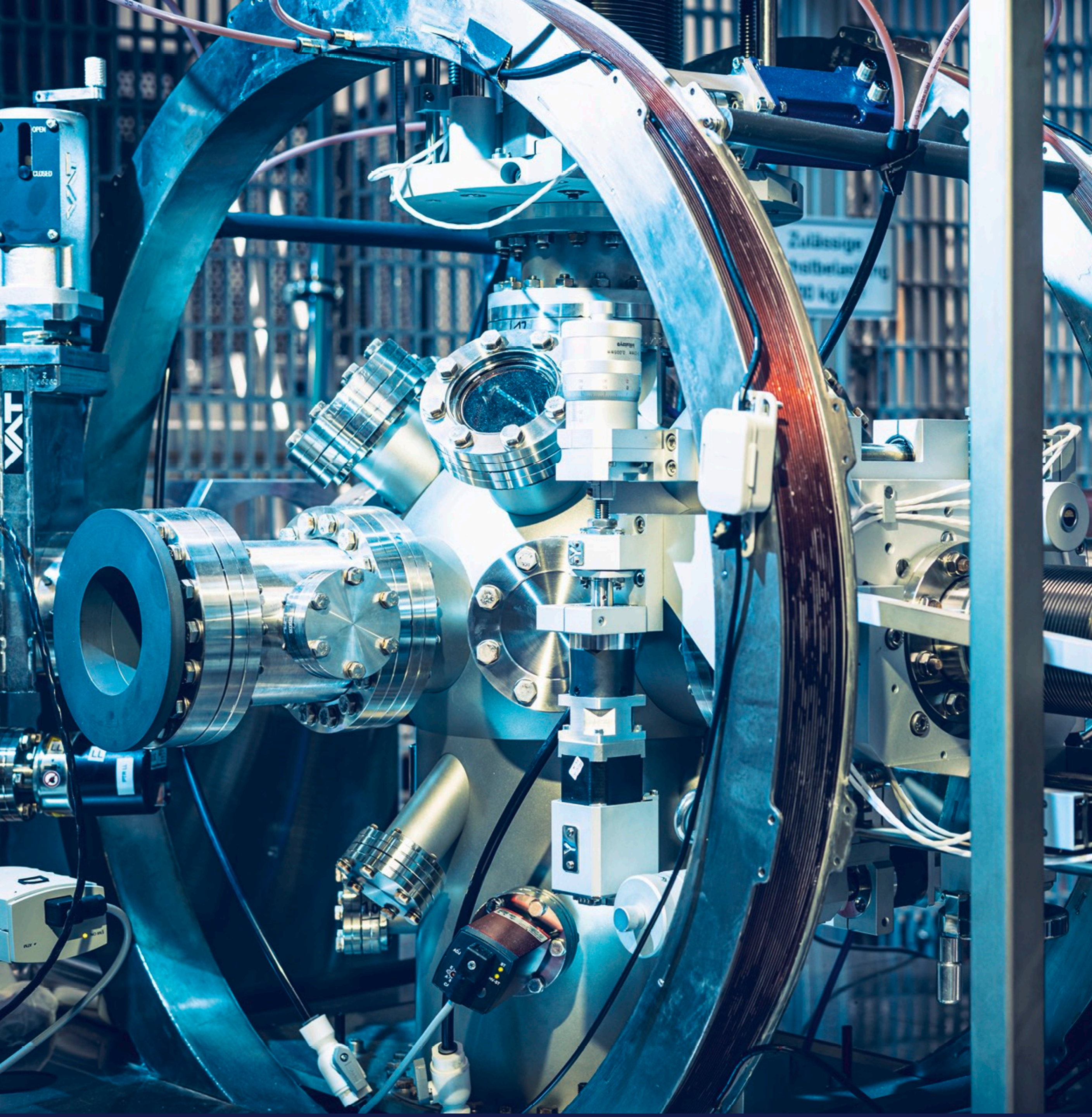
15:15 → 15:30

Coffee/Tea

15:30 → 16:30 **Exchange on (Meta)Data Management**

HELIPORT, RDMO, PID

Sprecher: Maik Fiedler (HZDR), Oliver Knodel (Helmholtz-Zentrum Dresden-Rossendorf), Stefan Mueller (Helmholtz-Zentrum Dresden-Rossendorf), Thomas Gruber (HZDR)



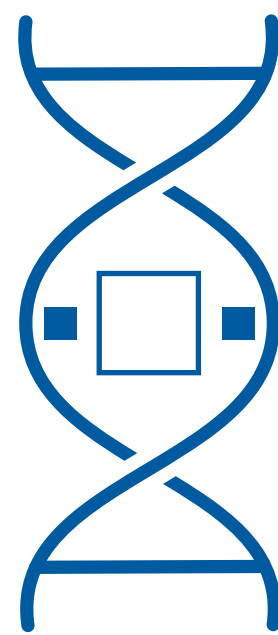
OUR MISSION



Challenges of our time

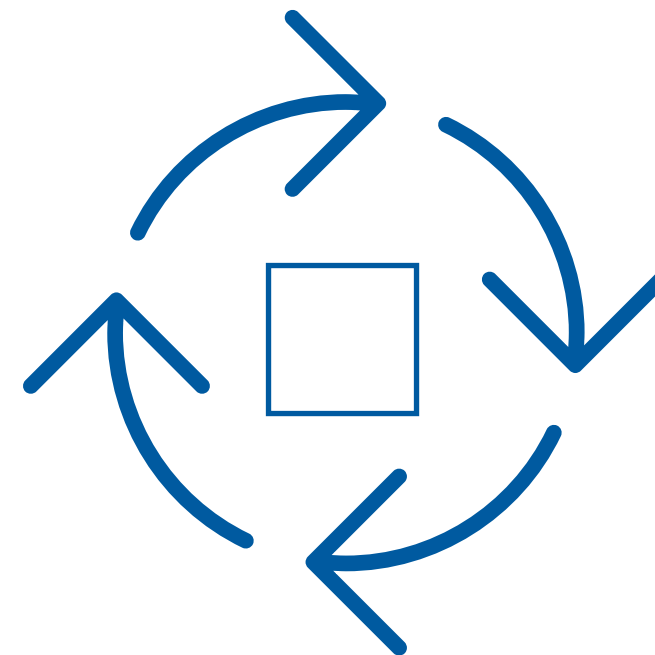
HZDR provides **knowledge** and **technologies** to ensure that current and future generations ...

Health



develop radiation-based diagnostics and therapeutic procedures to fight the widespread disease of **cancer**,

Energy



help bring about the climate transition by leveraging **resource and energy efficiency**,

Matter



research and apply innovative **materials under extreme conditions**.



OUR BASIS



Facts and figures (as of 2022)

Total annual budget

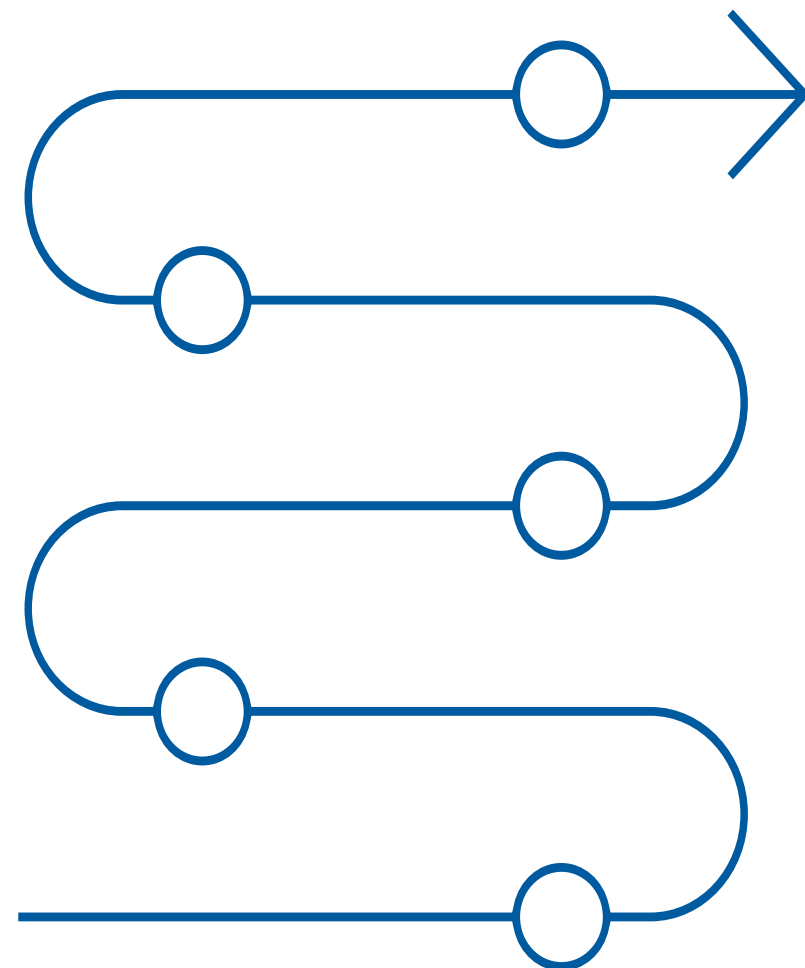
172.7 million euros

Including third-party funds of:

50.3 million euros

90 % federal funding

10 % state funding (Saxony)



Staff

approx. 1,500 total

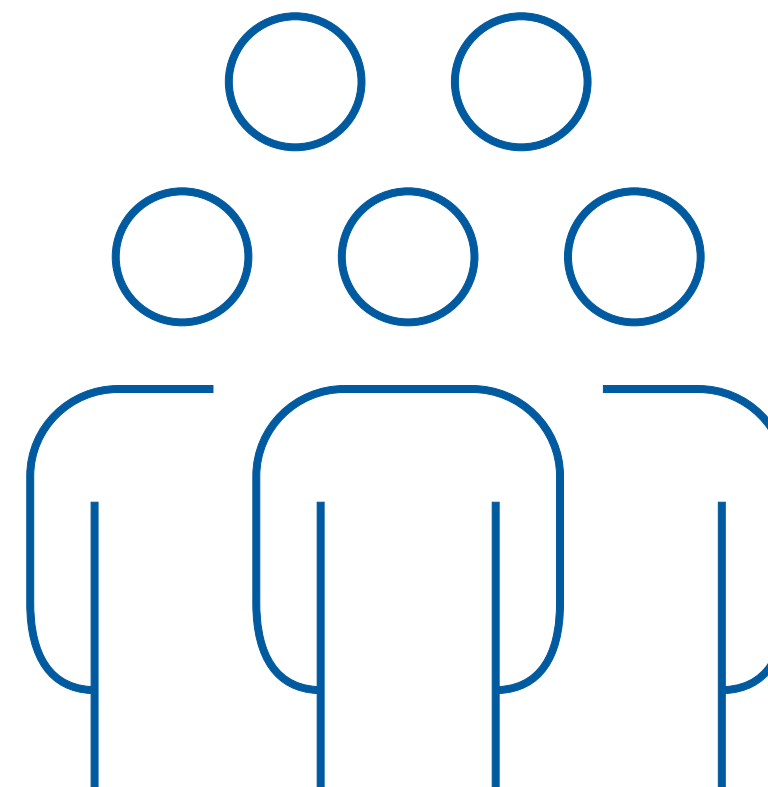


Including

approx. 670 scientists

approx. 220 doctoral students

>60 nations



Organization

10 institutes

15 Young Investigator Groups (Helmholtz / HZDR / DFG / BMBF / DDC)

766 publications per year

145 patent applications (since 2011)



Our Research Facility and our Large Scale Research Infrastructures

The Helmholtz-Zentrum Dresden - Rossendorf

- Employees approx. **1,500**. Thereof **670** scientists.
- Member of:

HELMHOLTZ
RESEARCH FOR GRAND CHALLENGES

ELBE – Center for High-Power Radiation Sources

- Electron accelerator, free-electron lasers & THz source.
- Positrons, protons, neutrons as well as X-ray and gamma radiation.

Dresden High Magnetic Field Laboratory (HLD)

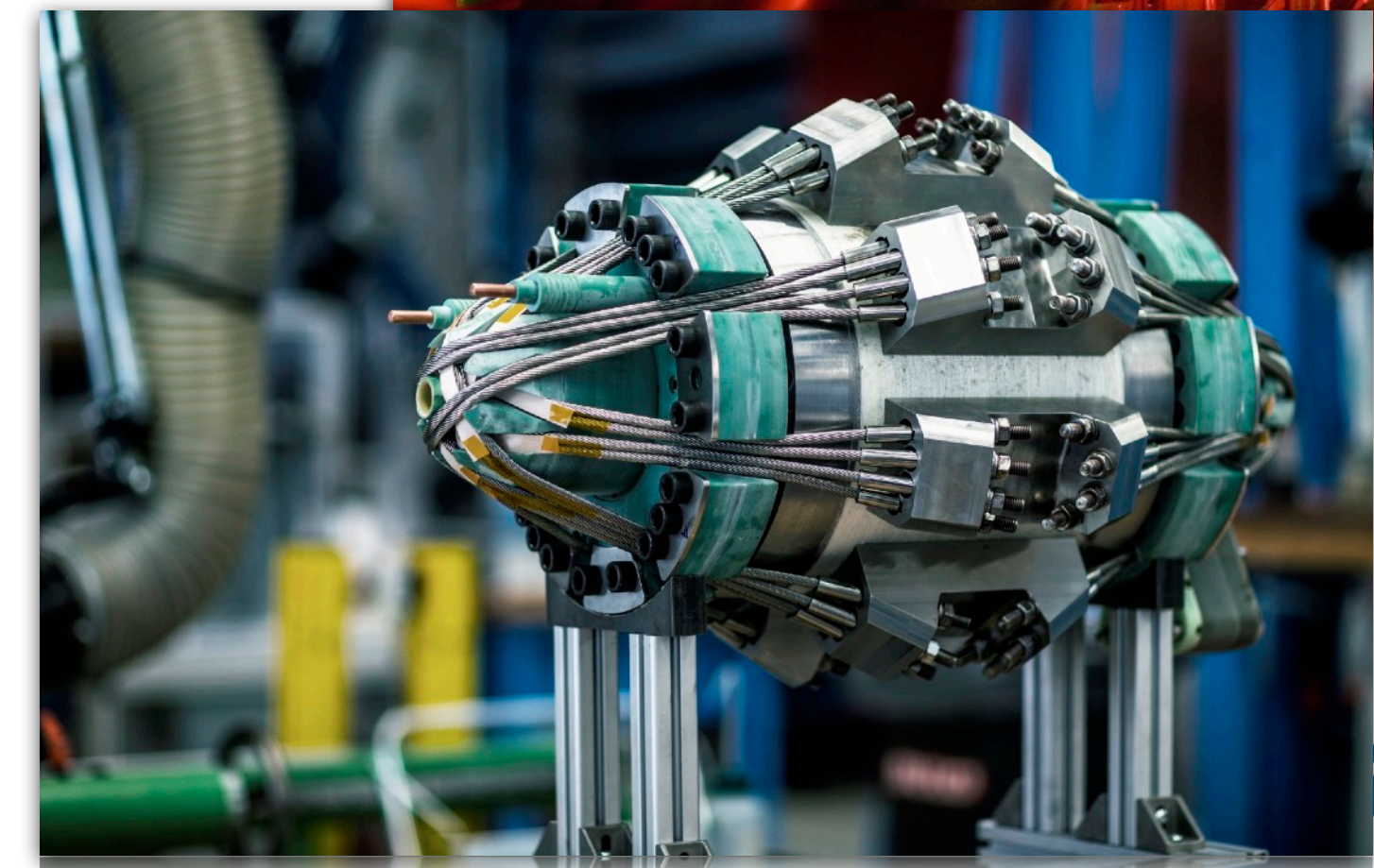
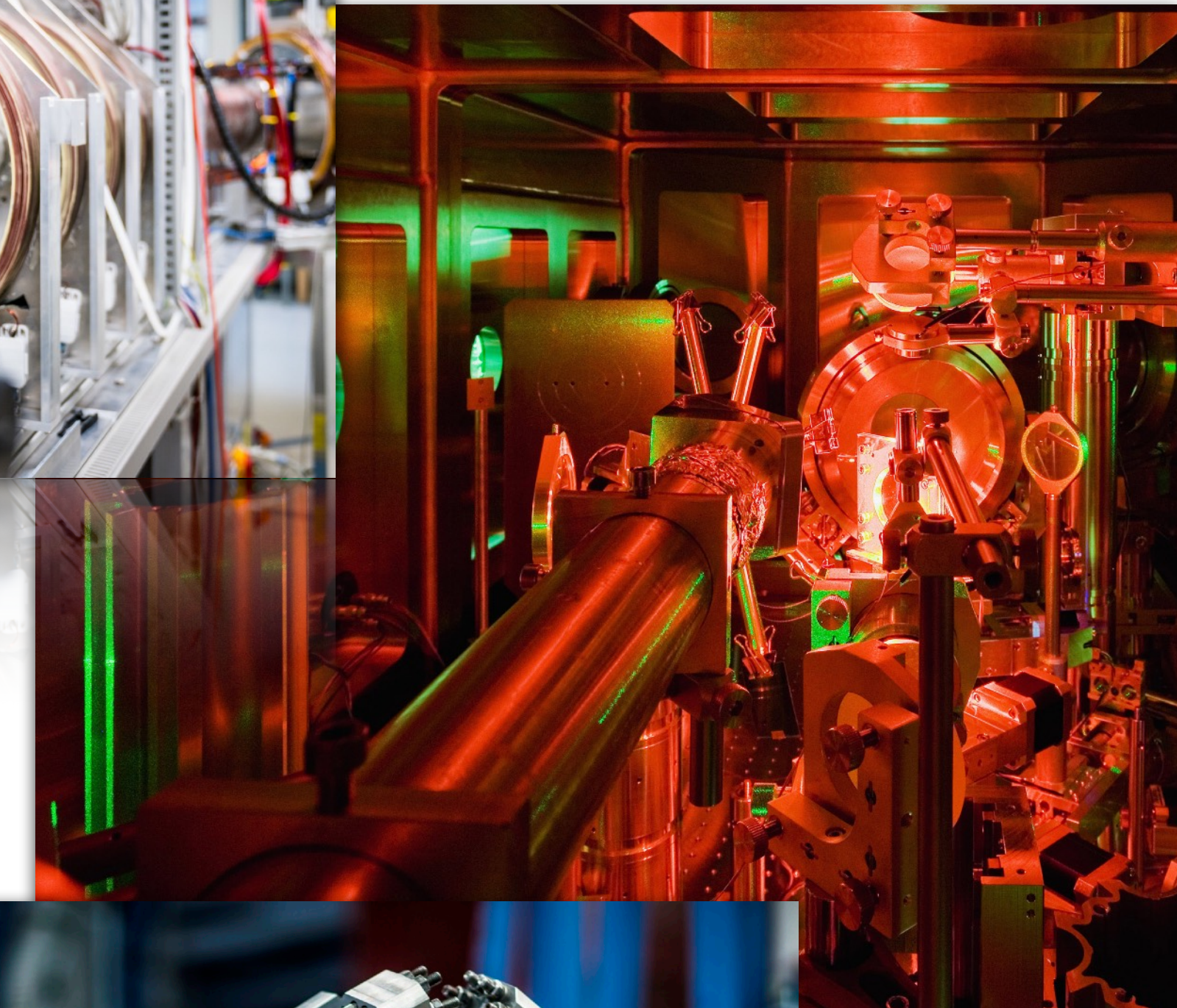
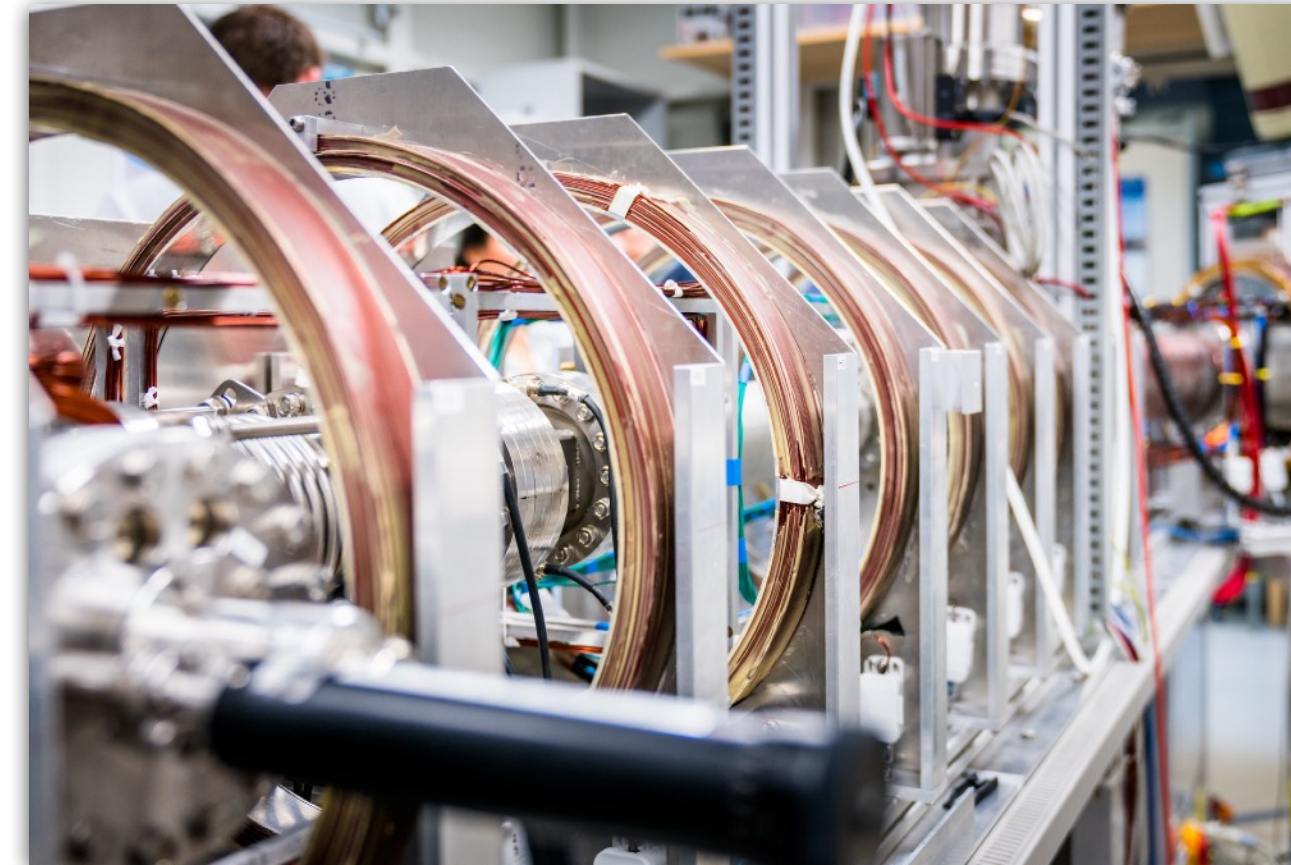
- Europe's highest pulsed magnetic fields.

Ion Beam Center (IBC)

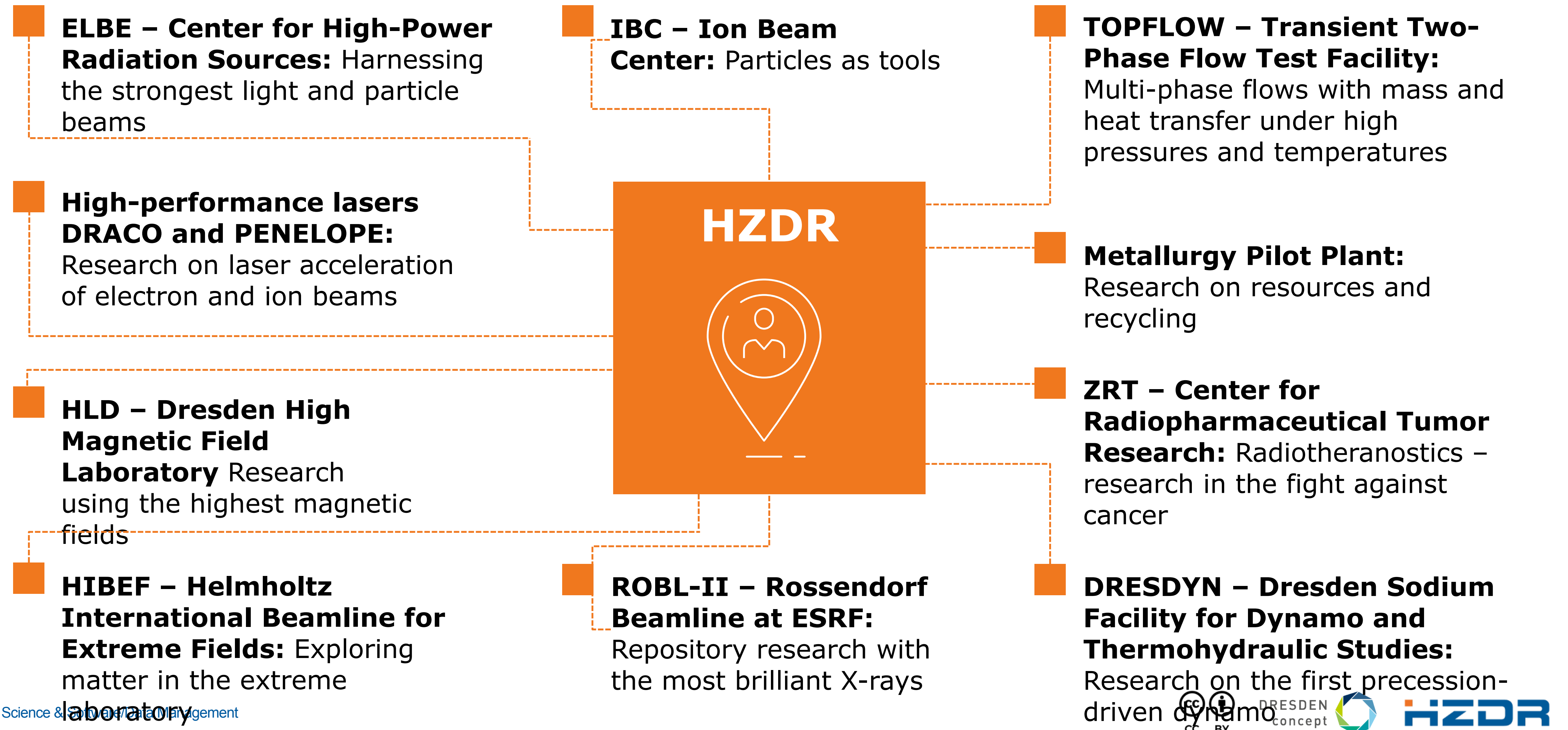
- Nanoscale surface analysis and modification.

DREsden Sodium facility for DYNamO (DRESDYN)

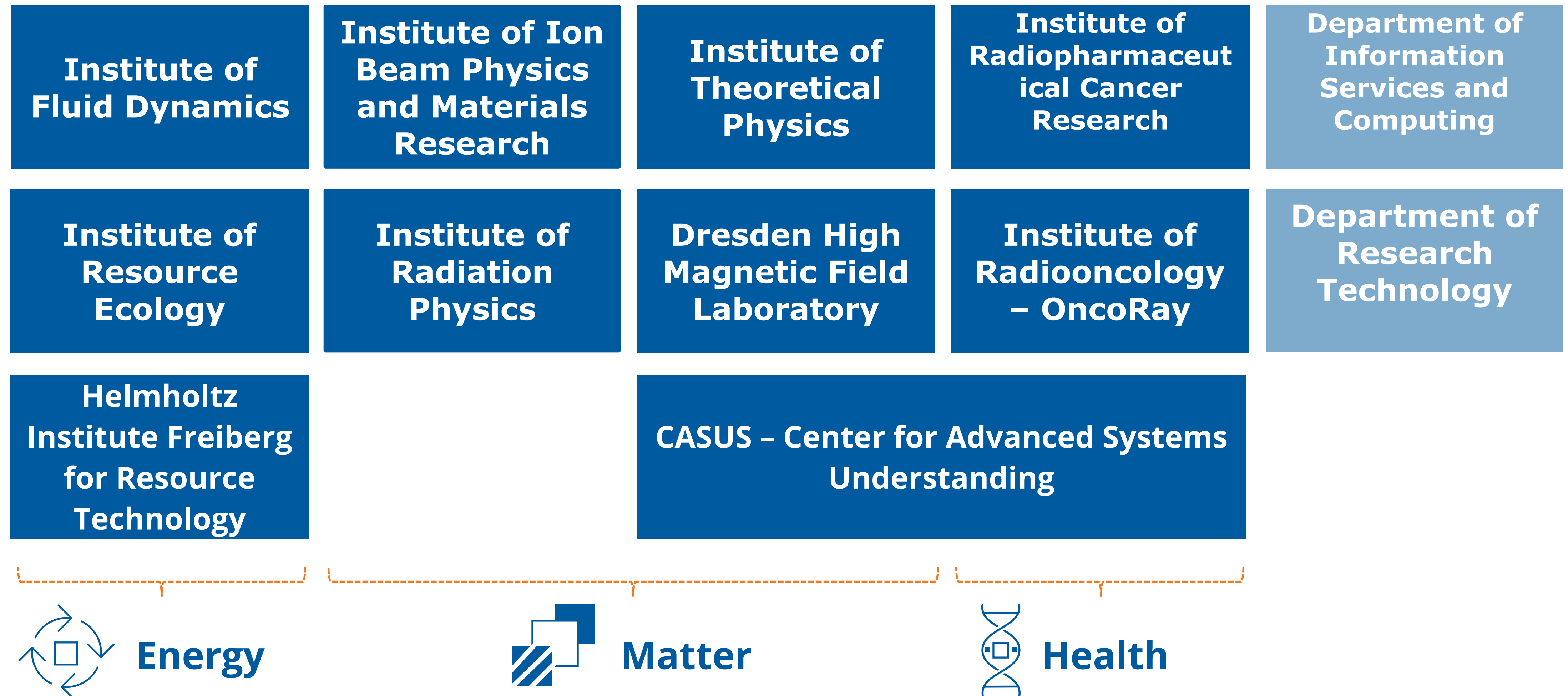
- Large scale liquid sodium experiments with geo- and astrophysical background.



Large-scale facilities drive progress



Institutes and central departments



Our Structure

HZDR research sites

DRESDEN ■ Campus Rossendorf / OncoRay
/ Felsenkeller / NCT

FREIBERG ■ Helmholtz Institute Freiberg
for Resource Technology

GÖRLITZ ■ CASUS – Center for Advanced
Systems Understanding

GRENOBLE ■ Rossendorf Beamline (ROBL)
at the European Synchrotron Radiation
Facility (ESRF)

LEIPZIG ■ Departments of the Institute of
Resource Ecology and the Institute of
Radiopharmaceutical Cancer Research

SCHENEFELD ■ Helmholtz International
Beamline for Extreme Fields (HIBEF) at the
European XFEL

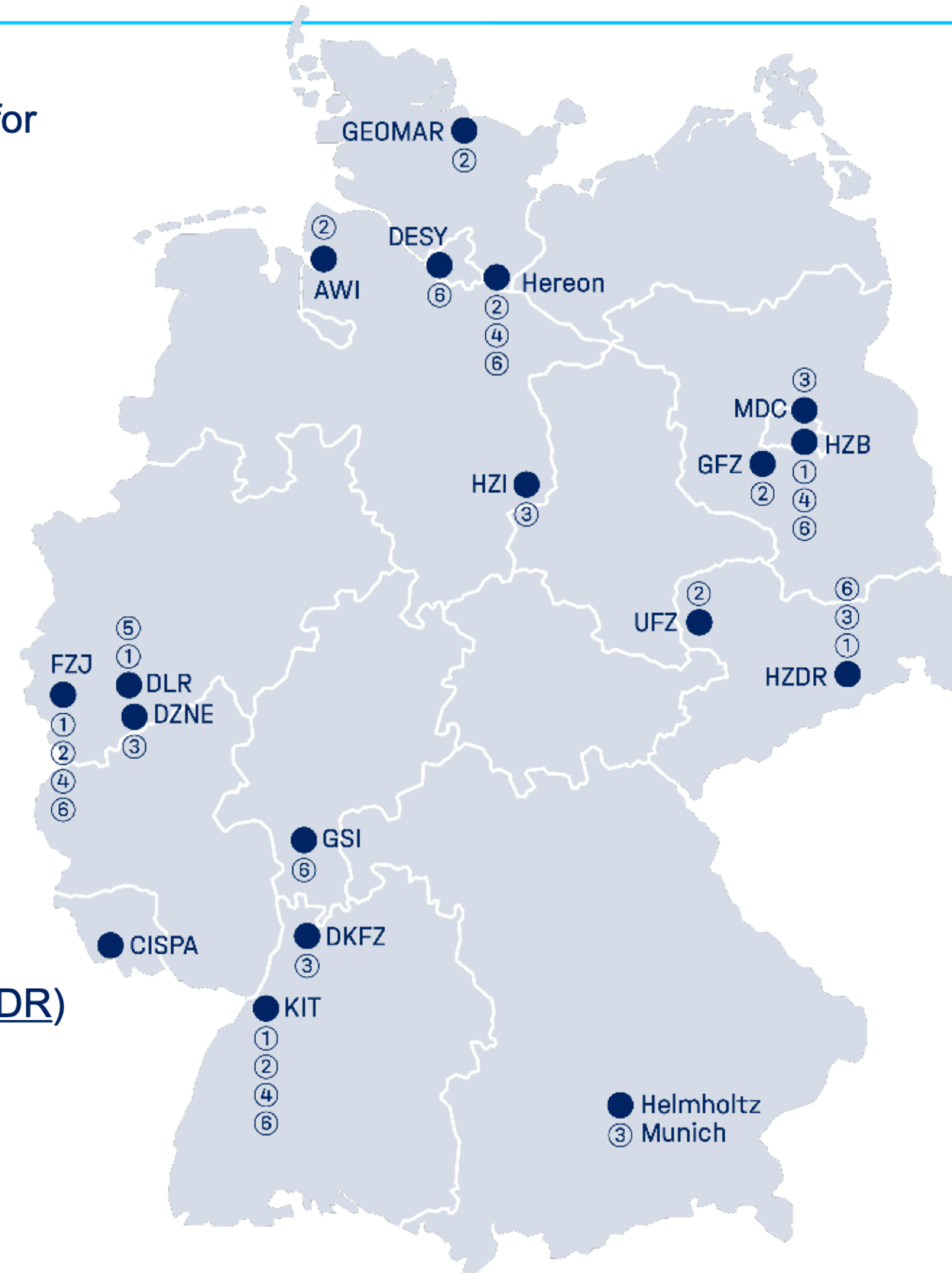


Helmholtz Association

Helmholtz research centers

18 centers in 6 Research Fields

- Alfred Wegener Institute Helmholtz Centre for Polar and Marine Research ([AWI](#))
- [CISPA](#) – Helmholtz Center for Information Security
- Deutsches Elektronen-Synchrotron [DESY](#)
- Forschungszentrum Jülich ([FZJ](#))
- [GEOMAR](#) Helmholtz Centre for Ocean Research Kiel
- German Aerospace Center ([DLR](#))
- German Cancer Research Center ([DKFZ](#))
- German Center für Neurodegenerative Diseases ([DZNE](#))
- [GSI](#) Helmholtz Center for Heavy Ion Research
- Helmholtz Center Dresden Rossendorf ([HZDR](#))
- Helmholtz Center for Environmental Research – [UFZ](#)



- Helmholtz Center for Infection Research ([HZI](#))
- Helmholtz Center Potsdam – German Research Center for Geosciences [GFZ](#)
- [Helmholtz Munich](#)
- Helmholtz-Zentrum Berlin für Materialien und Energie ([HZB](#))
- Helmholtz-Zentrum Hereon
- Karlsruhe Institute of Technology ([KIT](#))
- Max Delbrück Center ([MDC](#))

Research Fields:

- (1) Energy, (2) Earth and Environment
 (3) Health, (4) Information
 (5) Aeronautics, Space and Transport, (6) Matter

The six research fields of the Helmholtz Association



Helmholtz in Numbers



46,000

Employees at Helmholtz are working on the world of tomorrow.

6 Mrd

Euro budget annually offers our talents excellent conditions for cutting-edge research.

18

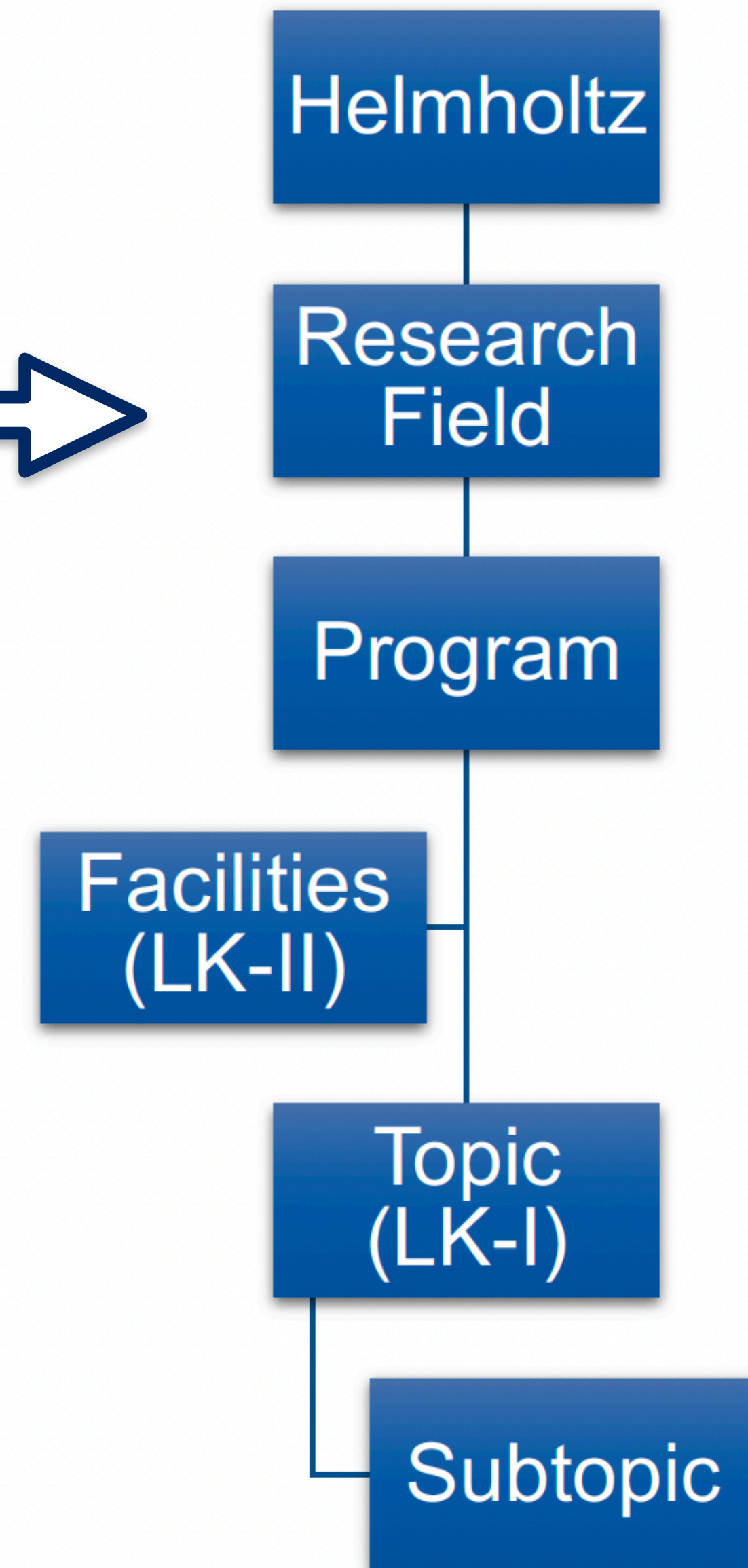
national labs are dedicated to the big questions of our time every day.

14,500

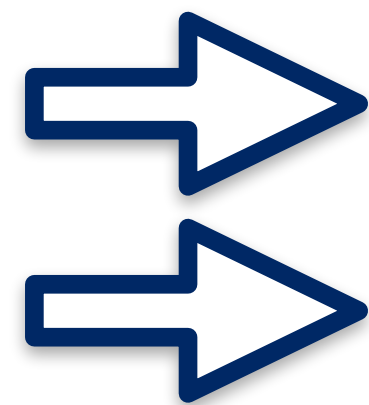
Researchers from all over the world use our research infrastructures every year.

Funding Structure in Helmholtz

POF = Program Oriented Funding with LK-I and LK-II



Incubator Information and Data Science Platforms



Helmholtz Information & Data Science Academy (HIDA) & Research schools	+
Helmholtz AI	+
Helmholtz Federated IT Services (HIFIS)	+
Helmholtz Metadata Collaboration (HMC)	+
Helmholtz Imaging	+