

## Program-oriented Funding of the Helmholtz Association

### Research Field *Matter*

#### *Participating Research Centers*

*DESY, FZJ, GSI, HZB, HZDR, HZG, IPP (associated), KIT  
2021 – 2027*

Ilja Bohnet

10th December 2020

# Research Centers of the **Research Field Matter**

**in PoF IV** (incl. IPP as associated partner)

Deutsches Elektronen-Synchrotron DESY  
Hamburg and Zeuthen

Forschungszentrum Jülich (FZ Jülich)  
Jülich

GSI Helmholtzzentrum für Schwerionenforschung  
Darmstadt

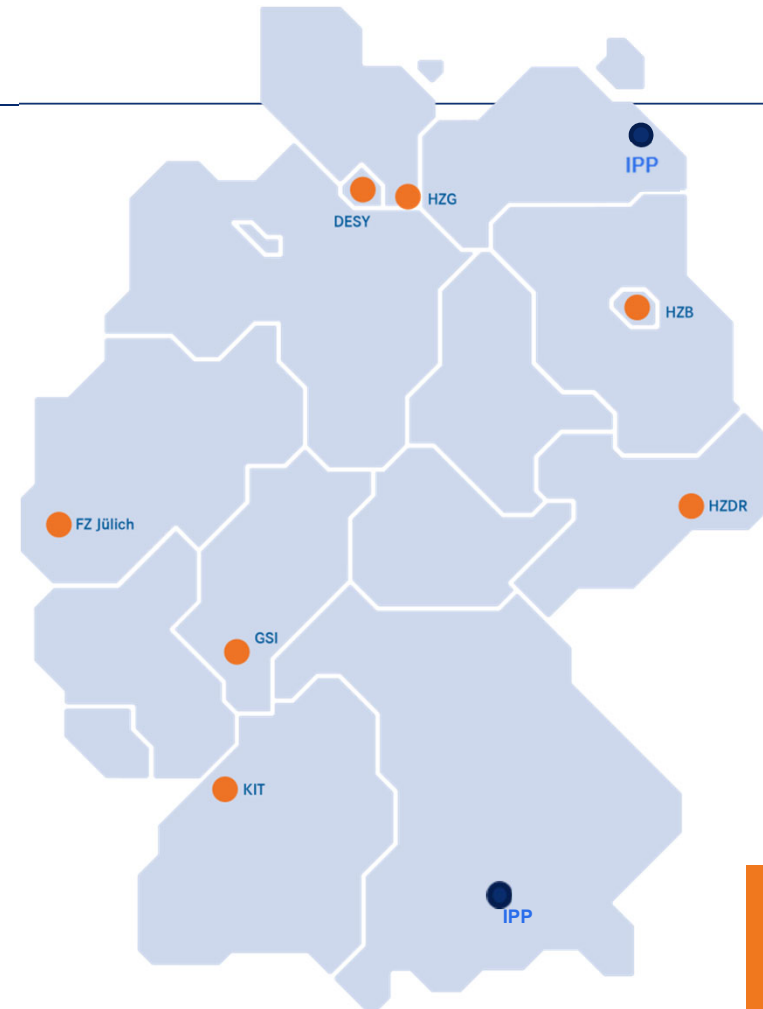
Helmholtz-Zentrum Berlin für Materialien und Energie (HZB)  
Berlin

Helmholtz-Zentrum Dresden-Rossendorf (HZDR)  
Dresden

Helmholtz-Zentrum Geesthacht  
Centre for Materials and Coastal Research (HZG)  
Geesthacht

Karlsruhe Institute of Technology (KIT)  
Karlsruhe

Associated in PoF IV:  
Max-Planck-Institut für Plasmaphysik (IPP)  
Garching and Greifswald



MATTER

# Research Centers & Program Structure of Matter in PoF III

## Program Structure of **PoF IV**

### Matter and the Universe (MU)

Fundamental Particles and Forces  
(Elementary Particle Physics , FPF)

Cosmic Matter in the Laboratory  
(Hadron and Nuclear Physics, CML)

Matter and Radiation from the Universe  
(Astroparticle Physics, MRU)

Large-scale facilities: GridKa (Computing),  
LSF for Research with Ions

### From Matter to Materials and Life (MML)

Dynamics, Mechanisms and Control  
(Structure and Dynamics of matter, DMC)

Quantum, Complex and Functional  
(Functionality of Matter, QCF)

Building Blocks of Life  
(Life Science, BBL)

LSF for Research with  
Photons

LSF for Research  
with Neutrons

LSF for Research with  
Ions

LSF for Research  
in Electromagnetic  
Fields

### Matter and Technologies (MT)

Accelerator Research & Development (ARD)

Detector Technologies & Systems (DTS)

Data Management and Analysis (DMA)

IDAF (Computing and Data Science)

# Strategic Evaluation of the Program Proposals PoF IV

(and final assessment after the Scientific Evaluations in 2017 – 2018)

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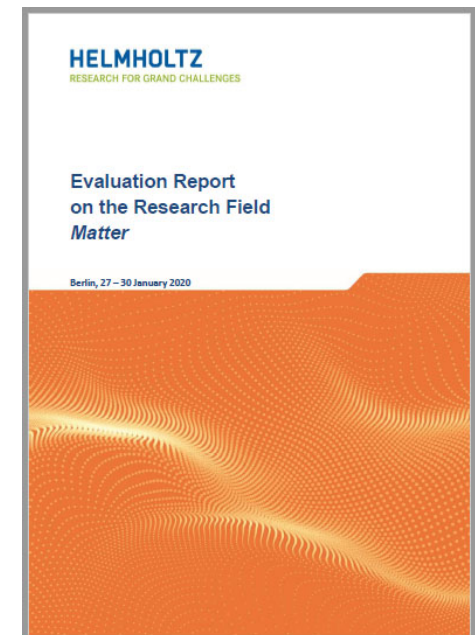
- 3-Days Review in January 2020 in Berlin
- 10 Reviewers - former chairs of the scientific evaluation plus additional members, chaired by Ursula Bassler (CNRS)
- Assessments for each topic and program on 4 dimensions:
  - Goals
  - Work Program
  - Competences
  - Impact & Risks
- Concise statements for the four dimension of each topic
- Strategic recommendations for the development of the entire Research Field
- Basis for a stable base funds of the research centers

# Strategic Evaluation of the Program Proposals PoF IV

(and final assessment after the Scientific Evaluations in 2017 – 2018)

- Evaluation Report on the Research Field Matter (47 pages)
- Some main statements on the entire Research Field:

*“The Research Field Matter is characterized by world-class research facilities; the staff has excellent expertise in the development and operation of accelerators, detectors and computers. The research in the areas of elementary particle physics, hadron and nuclear physics, and astroparticle physics has a high international visibility, as does the in-house science at the user facilities for research with photons, neutrons, ions and with high electromagnetic fields. Within this outstanding network, which also includes a strong cooperation between Helmholtz and the German and foreign universities, the Research Field with its three programs is developing strong impact on the international level in which the full force of Helmholtz science is brought to bear.”*



# Strategic Evaluation of the Program Proposals PoF IV

(and final assessment after the Scientific Evaluations in 2017 – 2018)

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- Some main statements on MU-CML:

*“There is strong existing expertise within the program in heavy ion collisions. Full advantage will be taken of operating accelerators with world-leading capabilities. These accelerators as planned to be used for FAIR Phase-0 have already undergone substantial improvements as part of the FAIR project. [...] The program has a broad strength and effective collaboration between experiment and theory in nuclear science, which is essential to advance effectively the working program. The Helmholtz centers and institutes involved have also have considerable experience in organizing and hosting large international collaborations.”*

- Recommendations
  - *Take full advantage of FAIR Phase-0 and ALICE during PoF IV.*
  - *With the use of FAIR Phase-0, accomplish smooth transition from old to new facilities at GSI.*
  - *Nurture the novel idea for EDM determination in COSY.*
  - *Continue to clarify the TransFAIR (FZJ/GSI) evolution.*

# The Initiative and Networking Fund



## Impuls- und Vernetzungsfonds des Helmholtz-Präsidenten

### Mission

- Fixed-term funding for Helmholtz Centers and their university partners
- Starting grants for innovative, interdisciplinary research projects
- Support for Helmholtz' goals within the Pact for Innovation and Research

### Criteria

- Scientific excellence
- Strategic and societal relevance
- No ‚double dipping‘ with respect to POF funded research

### Key facts

- Yearly calls for proposals since 2003
- Budget 2021: 79 Mio. Euro
- Over 350 running projects
- Project duration of 5 years maximum

### Standards

- Funding within the framework of calls for proposals
- Peer review by international experts
- Typically matching funds by the applicant Helmholtz Center

- Established funding instruments (as YIGs etc.)
- New instruments (pioneering projects strengthening cross-cutting activities, entrepreneurialships, educational activities)

- The funds available for INF projects will decrease from 81 million in 2020 to 50 million in 2024 ff.
- GSI hasn't to pay into the INF, but therefore only HIM and HI Jena can participate.

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*Thank you for your Attention!*