

Matter and Technologies

Rehearsal in Dresden, Feb 24/ 25

Introduction

Ties Behnke, program speaker

Matter and the Universe

Fundamental
Particles and Forces

Cosmic Matter
in the Laboratory

Matter and Radiation
from the Universe

From Matter to Materials and Life

In-House Research on the
Structure, Dynamics and
Function of Matter at
Large Scale Facilities

Facility Topic:
Research on Matter with
Brilliant Light Sources

Facility Topic:
Neutrons for Research
on Condensed Matter

Facility Topic:
Physics and Materials
Science with Ion Beams

Facility Topic:
Research at Highest
Electromagnetic Fields

Matter and Technologies

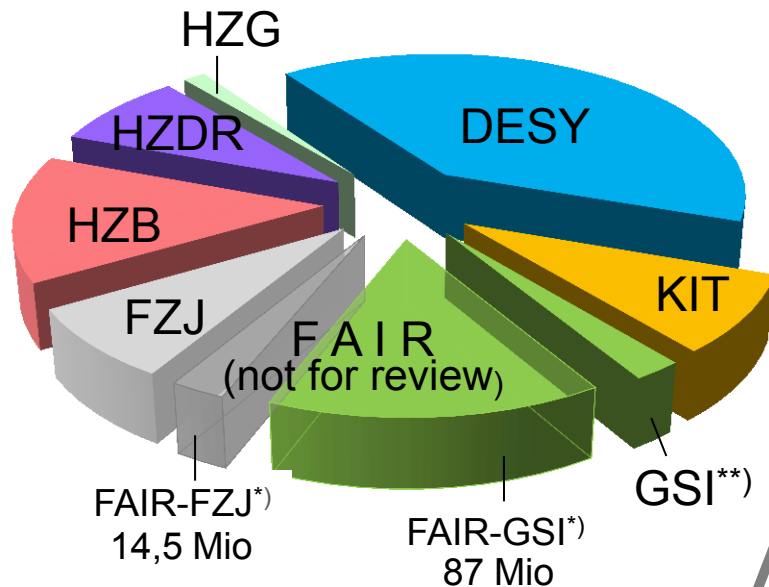
Accelerator
Research and Development

Detector
Technologies and Systems

LK II

„performance category II“
= user operation of large
scale facilities

■ Participation of the Centres and Resources

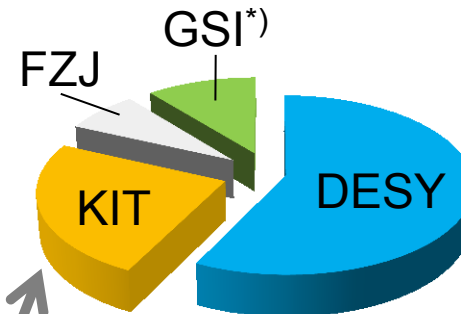


MATTER

465 Mio € / year (for review)
 Operation user facilities: 300 Mio €
research 165 Mio €

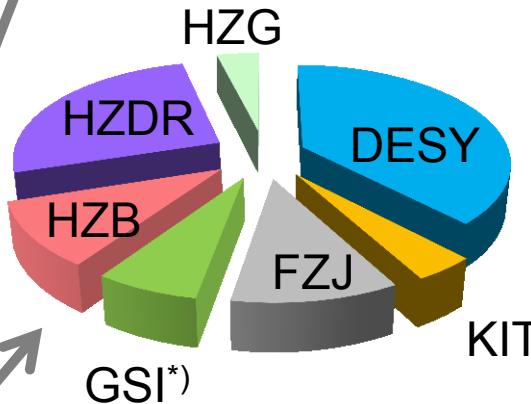
*) only for information

**) HI Mainz and Jena, HIC4FAIR



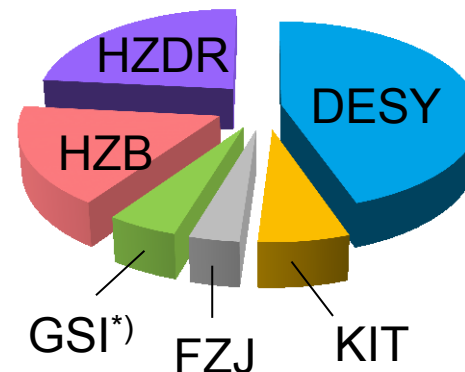
Matter and the Universe

64 Mio € / year



From Matter to Materials and Life

59 Mio € / year



Matter and Technologies

42 Mio € / year

POF

POF = Program oriented funding

- Helmholtz Budget (90% federal, 10% local state) comes from the Helmholtz Association
- Centers participate in programs within Helmholtz
- All activities within Helmholtz are part of a program
- All money which is not “project money” comes from Helmholtz
- The programs are reviewed every 5 years
 - Overall structure
 - Program + topics strategy
- The process is complex:
 1. Federal government: central guidelines, political goals
 2. Helmholtz researcher: structure the work into research fields and topics
 3. Make proposal program by program
 4. Competition for available funds between programs and program areas
 5. Review by international panel, funding proposal, funding decision by Helmholtz

2009 - 2014 (POF II) *)

Particle Physics

Astroparticle Physics

Hadrons and Nuclei

Photons, Neutrons, Ions

*) POF = Programme Oriented Funding

Programme Structure

2015 - 2019 (POF III)

Matter and the Universe
(MU)



J. Blümer, KIT

Fundamental Questions

From Matter to Materials and Life
(MML)



A. Schreyer, HZG

From Basic Research to Applied Sciences

Matter and Technologies
(MT)



T. Behnke, DESY

Enabling Technologies

Review Dresden

13:00 - 13:45	Preparatory meeting	Closed
15:15	Coffee	
18:30	Dinner	Dir, Speaker, topic speaker

9:00	Closed Session		Closed
9:30	Presentation of the program		Everyone
11:30	Poster session		Poster presenters
13:30	ARD	DTS	Broad attendance, space permitting
15:30	Closed Session		
16:00	Strategic issues		As 13:30

9:00	Discussion with scientific council	Selected participants
11:00	Closed session	
15:30	Final (closed) discussion of results	DIR

Reviewers



S. Bertolucci



F. Sette



B. Schmitt



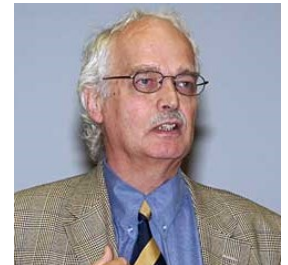
S. Bulanov



S. Meyers



C. Enss



R. Ott

P. Fayardo
+ 1 plasma expert



J. Galayda



A. Harrison



L. Linssen



P. McBride

Questions to the reviewers

A) Scientific quality on an international scale

1. How do you evaluate the originality of future research?

Please consider the originality and innovation in the proposed research topics with respect to new developments and technologies (national and international). Please consider not only what is planned, but also how it is planned in terms of implementation steps and milestones. What scientific impact on the respective research area and other scientific fields do you expect?

2. How do you rate the scientific competence of the groups contributing to the topic?

Please evaluate the performance, quality and productivity of the previous scientific work based, e.g., on the key performance indicators of the topics or principal investigators. Please consider whether the work contributed to recent advances in the research area (or related areas) or to technological developments.

Questionnaire

B) Strategic significance –

“Are we doing the right things? Are we doing the things right?”

1. How do you rate the alignment of the programme and its topics with the strategy of the research field?

How do you evaluate the strategic relevance with regard to the Helmholtz Mission?

Please consider the importance, complexity and long-term character of the problems addressed. If applicable, also consider the use or the potential of large-scale infrastructure and platforms. Do you consider the contribution to the “major challenges” as defined in the strategic guidelines of the government and the position paper appropriate? Is a Helmholtz centre the appropriate institution to perform the proposed research?

2. How do you evaluate the coherence of the programme and its topics?

Please consider whether important disciplines or expertise are missing. Are the contributions of the strategic partners appropriate and well integrated?

3. How would you judge the management of the programme and its topics as well as internal/external and national/international cooperation?

Please consider the mechanisms that ensure effective cooperation and programme performance e.g. with associated programme participants (communication, strategies, workshops, meeting schemes)? Are the programme scientists in a good position to work together? Are sufficient mechanisms in place to adapt the programme to current scientific developments?

Questionnaire

C) Strategic items related to the goals of the Joint Initiative for Research and Innovation

1. How do you evaluate the national and international standing and competitiveness of the proposed programme?

Please consider the relevance of the research activities compared to national and international competitors.

2. How do you evaluate talent management and recruiting mechanisms?

Please consider the instruments for education and promotion of young researchers and the mechanisms for recruiting outstanding scientists and providing prospects for their scientific careers. Are suitable processes implemented to recruit and retain outstanding scientists?

3. How do you evaluate the situation and mechanisms related to equal opportunity?

Please consider the instruments for promoting equal opportunity (in particular, gender balance and diversity management, especially beyond the postdoctoral level).

Experience from MaU Review

- What are the biggest challenges for the programme /programme topic
 - What are the holy grails
 - What do you want to achieve in the next 5 years !
 - Eigenforschung: why is this carried out Helmholtz instead of universities
 - What are the interdisciplinary aspects of the programme/topic X
 - Facilities: How are decisions made for new facilities/facility upgrades ?
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- How do the various program topics interact?
 - General questions on technology transfer
 - Leadership roles: national, European, international
 - What is missing in the programme?
 - What is not under control?

Plans for the next two days:

Rehearse the presentations

- Content
- Form
- Timing

Ask lots of questions, try to take a reviewers perspective.

Rehears the procedures/ the logistics

Get to know the “other” parts of the programme

Remember: we are one programme, we speak with one voice.
We focus on the programme, not on centers.