

ErUM: Exploration of the Universe and Matter

BMBF funding of collaborative research

– R&D Computing (Pilot ErUM-Data)

Dr. Wolfgang Ehrenfeld
Projekträger DESY

ErUM Data Pilot Project Kickoff Meeting
Munich, 21.02.2019

ErUM: Exploration of the Universe and Matter

A BMBF framework programme for basic research

Strategic and thematic framework

- of the Ministry of Education and Research
- for basic research at large-scale facilities

Timeframe

- 2017 – 2027

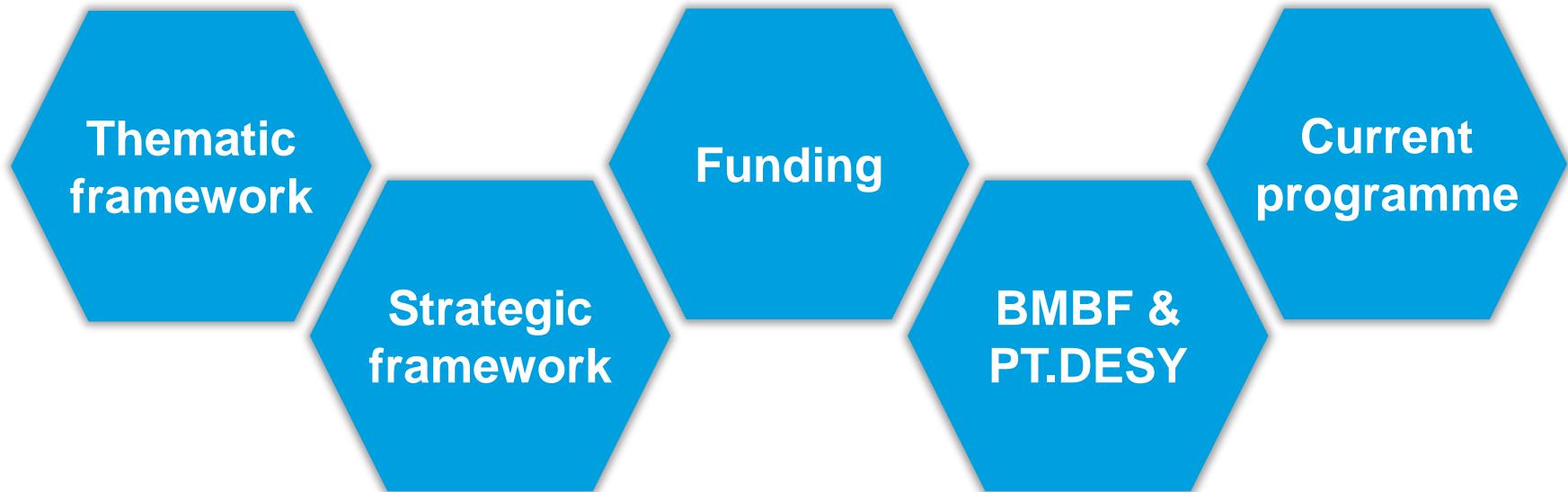
ErUM in numbers

23	~ 100	~ 30 %	~ 480	~ 740
research infrastructures worldwide	mil. € for projects per year	funding for scientific hardware	running projects	scientists working in ErUM projects



ErUM: Exploration of the Universe and Matter

Topical overview



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What ErUM is about



Thematic framework

What ErUM is about

Involving large-scale research infrastructures



www.fis-landschaft.de

Topics: From astro- to particle physics



Universe



Matter



Particles

Cross-cutting activities



Accelerator Development



Detector Development



Data Science

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What ErUM achieves and in what fields it operates



Strategic Framework

What ErUM achieves and in what fields it operates

Key Objectives



Scientific
Excellence



Future
Technologies



Innovation
Seeds



Talents for science
and industry



Participation

Fields of Action



Large-scale
Facilities



STEM
Young Scientists



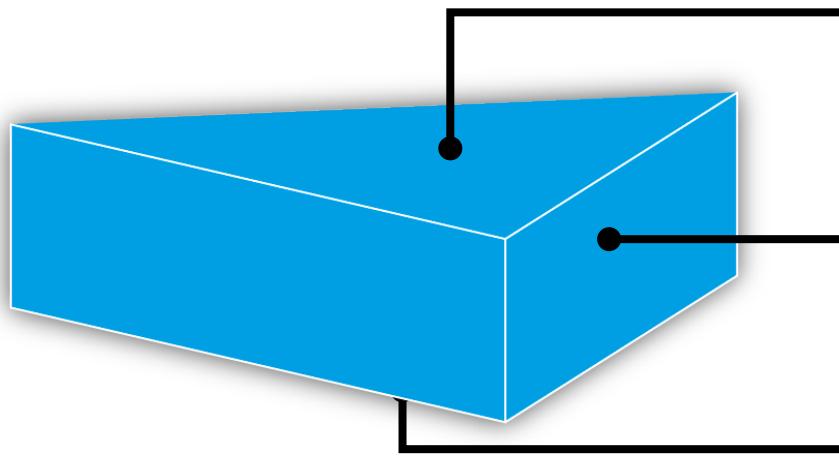
Networking



Transfer &
Participation

Strategic Framework

The Prism Process – ErUM's key strategic process



Federal ministry of education
and research

Higher education institutions

Scientific organizations

International research area

Civil society and private sector



Radar



Forum



Trialogues



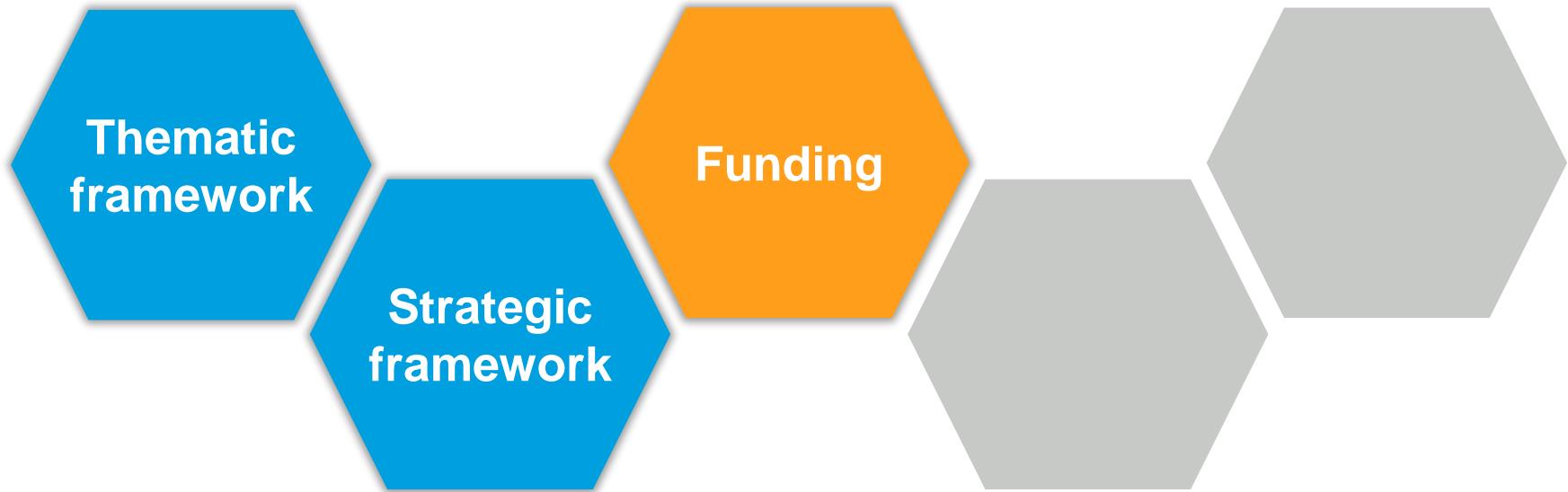
Strategy Discourses



Conferences

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How ErUM operates



Funding

How ErUM operates

BMBF

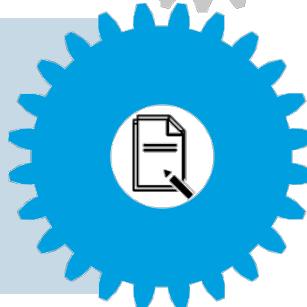
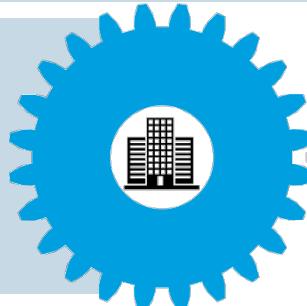
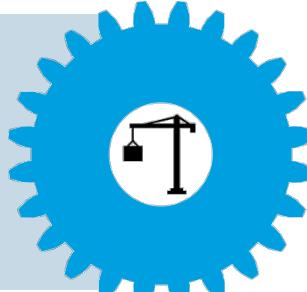
Planning and building scientific large-scale facilities



Institutional funding



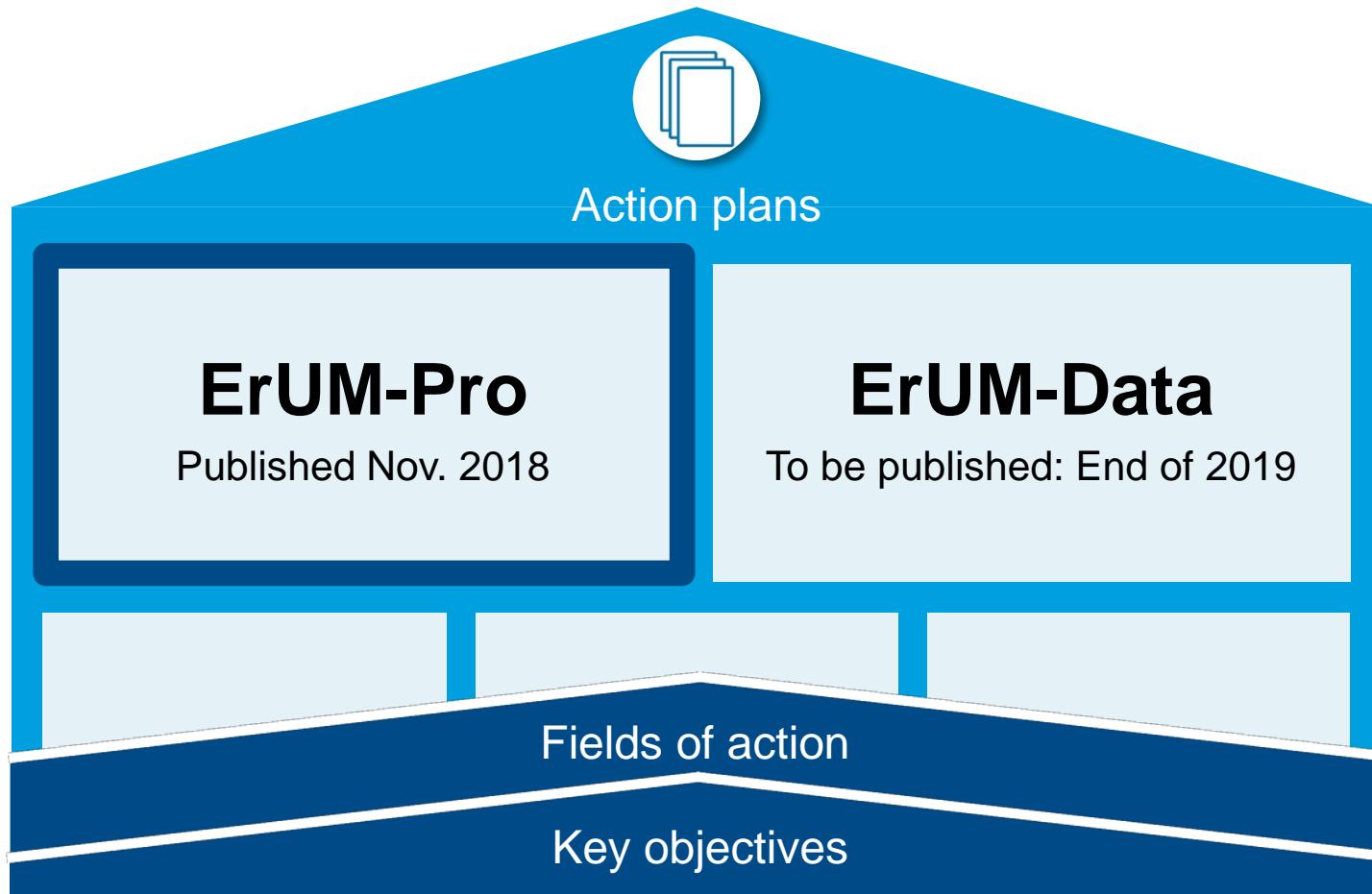
Project funding ErUM-Pro



Shaping the landscape of scientific large-scale facilities

Action Plans

Specifying and realizing of ErUM



Action Plans

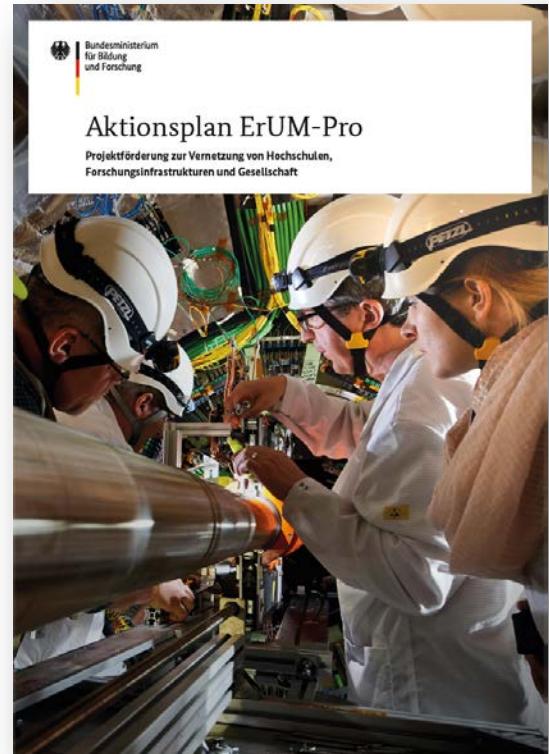
ErUM-Pro

Goals

- ☛ Enable excellent research
- ☛ Strengthen cross-cutting activities
- ☛ Consolidate German science and economy

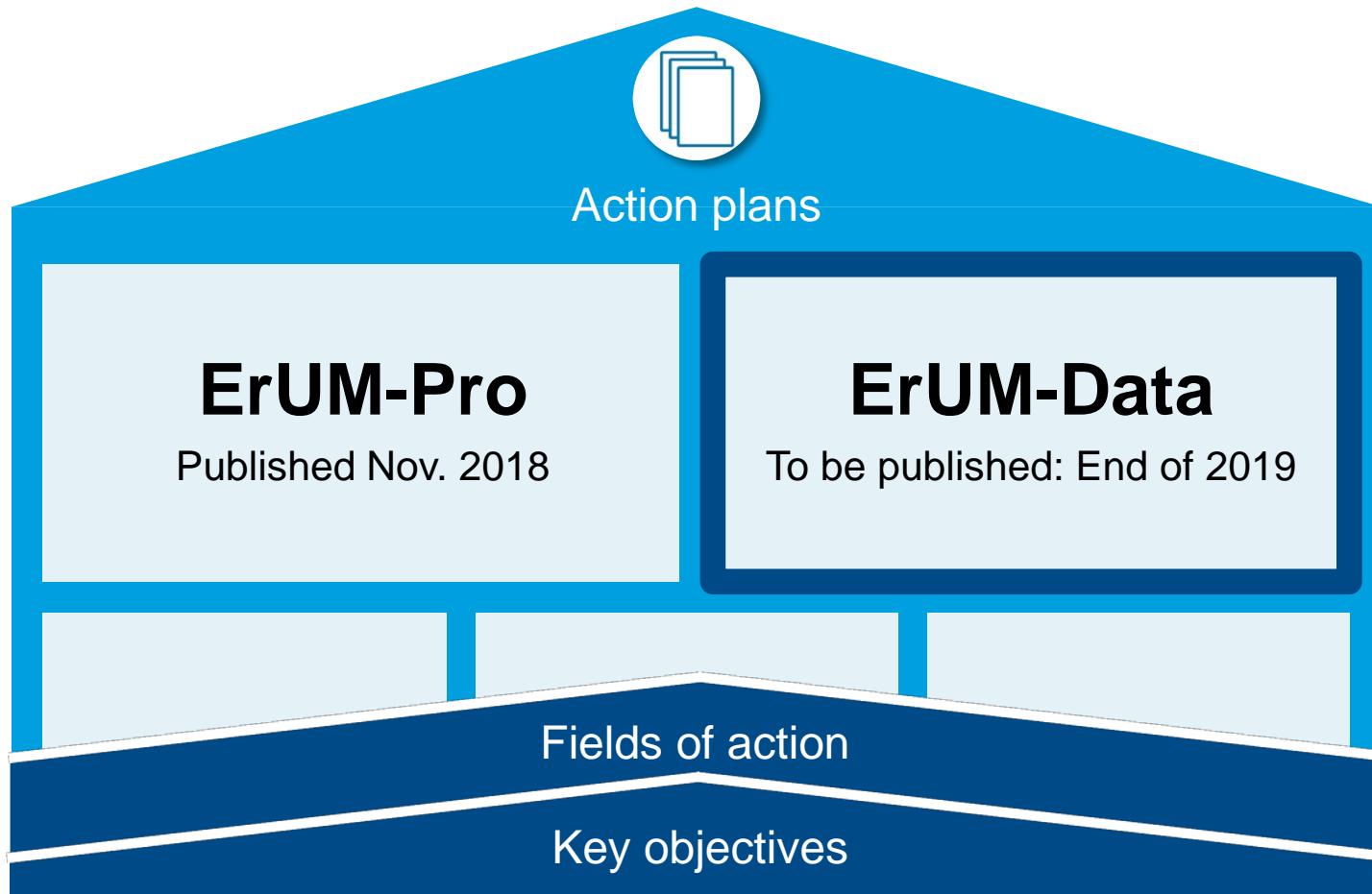
Focus

- ✓ Involving universities
- ✓ Strengthening of cross-cutting activities
- ✓ Connecting groups of interest



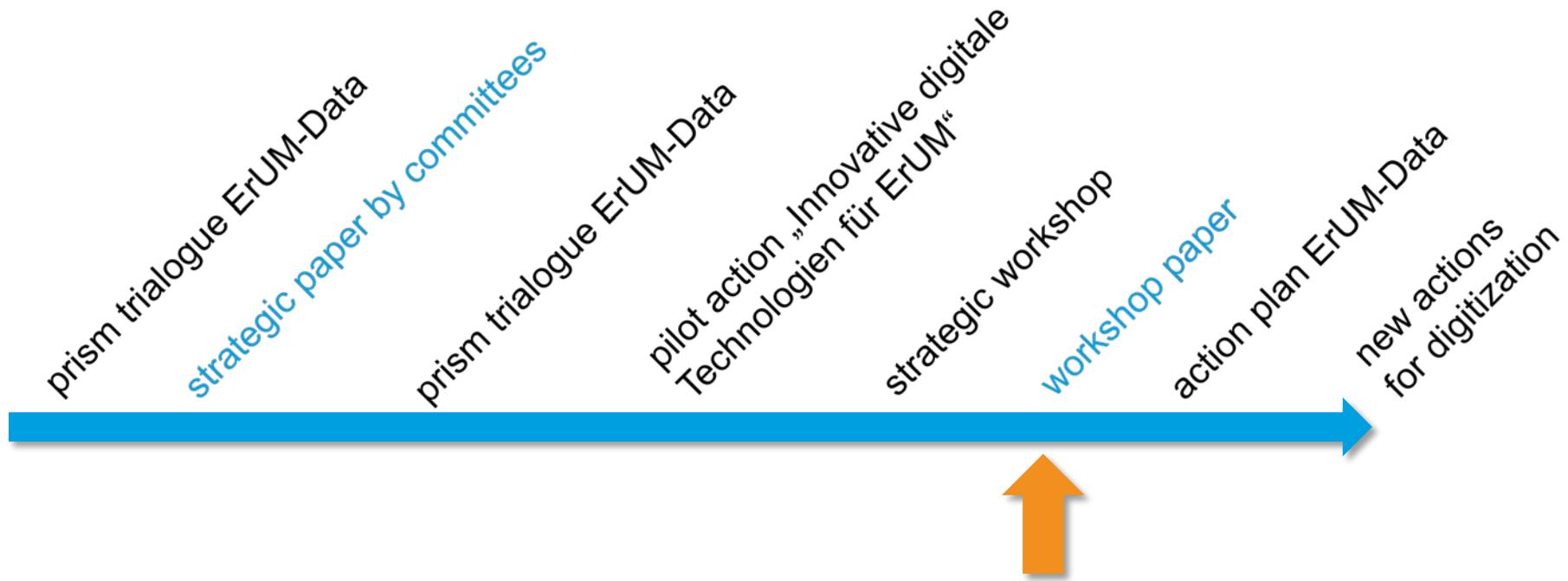
Action Plans

Specifying and realizing of ErUM



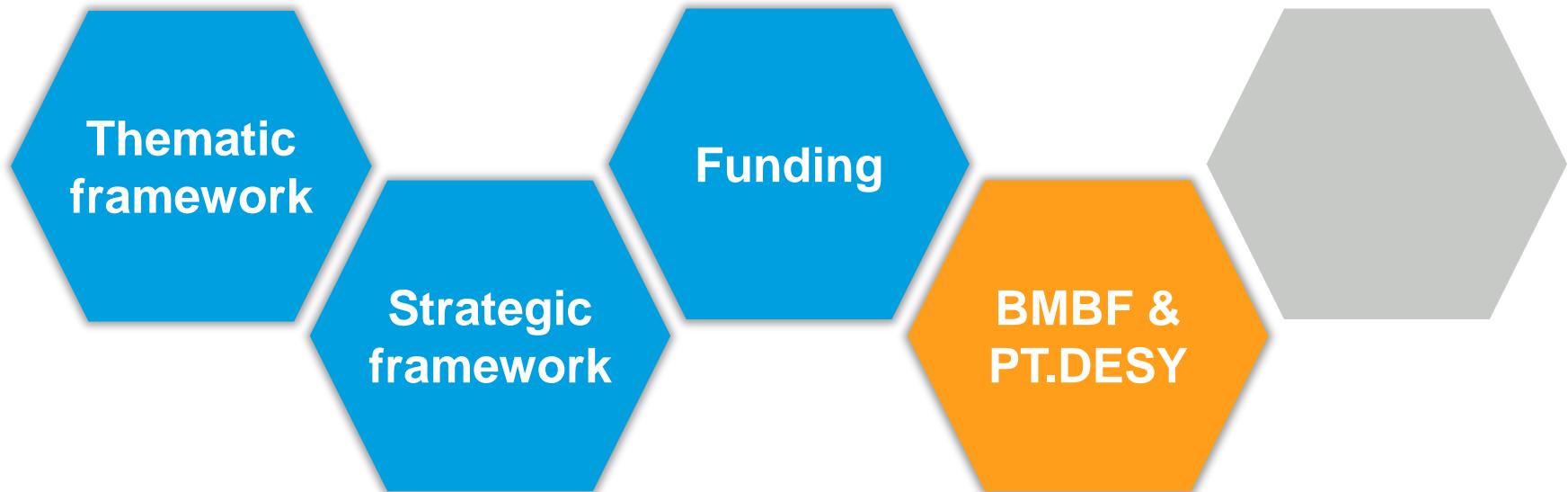
Action Plans

Steps towards the ErUM-Data action plan



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Who is who

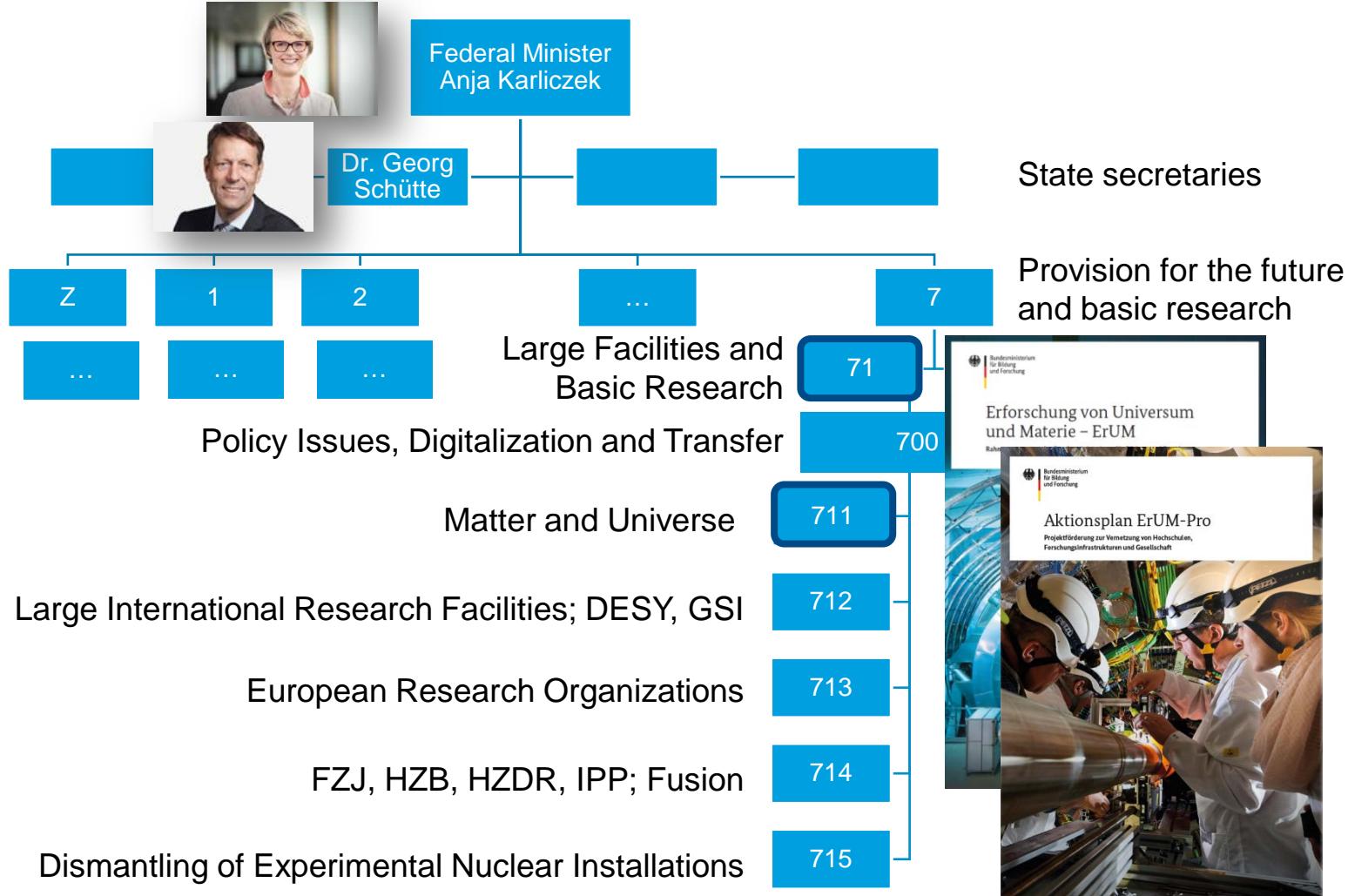


Who is Who in ErUM

The Federal Ministry of Education and Research (BMBF)



Federal Ministry
of Education
and Research



Who is Who in ErUM

Projektträger DESY: Project Management for Department 711



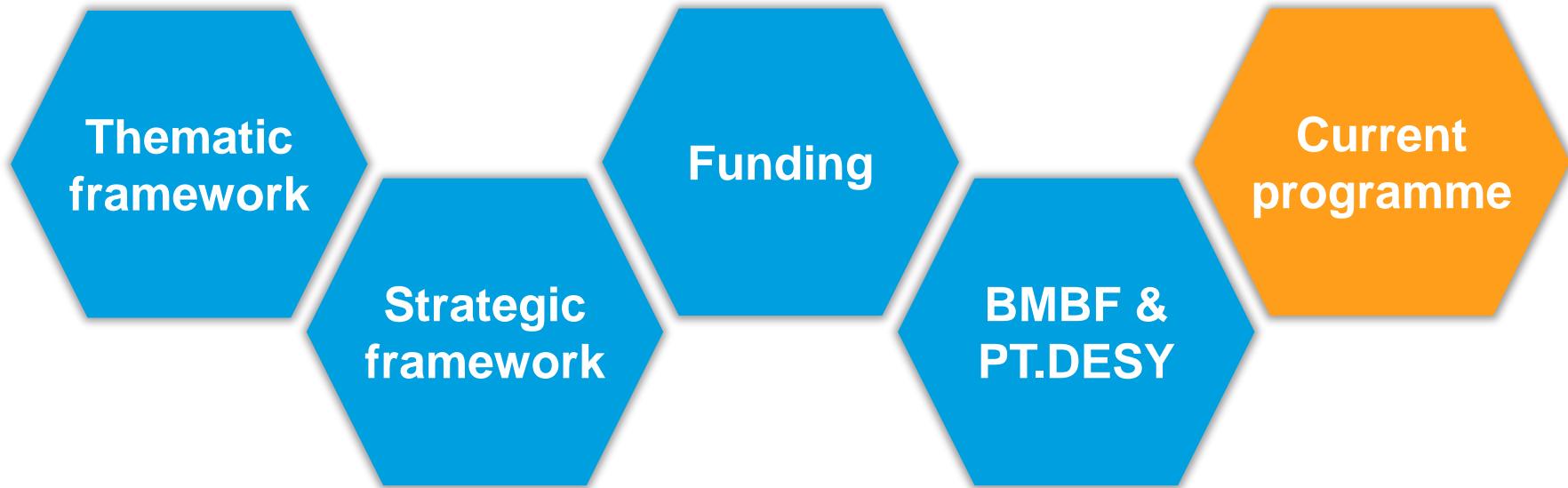
The screenshot shows the PT.DESY website. At the top, there is a navigation bar with links to DESY HOME, FORSCHUNG, AKTUELLES, ÜBER DESY, KARRIERE, and KONTAKT. On the right side of the header are icons for search, phone, email, and language selection (DE). The main title 'PT.DESY | Projektträger DESY' is displayed in a large blue header. Below the header, the page title 'Bekanntmachungen' is shown in blue. To the left, a sidebar lists various menu items: PT.DESY Home, Wer wir sind, Was wir leisten, Bekanntmachungen (with a list of dates: 07.09.2018 - Materie, 11.08.2017 - Teilchen, 14.03.2017 - Mathematik, 29.08.2016 - Universum), Für Zuwendungsempfänger, Karriere, and Kontakt. The main content area features two images: a photograph of a particle accelerator experiment and a photograph of a particle detector. Below each image is a blue link: '07.09.2018 - Materie >' and '11.08.2017 - Teilchen >'. To the right of the images is a sidebar titled 'Info' with a link to 'Aktuelle Bekanntmachungen von Förderprogrammen und Förderrichtlinien des BMBF'.

 pt.desy.de



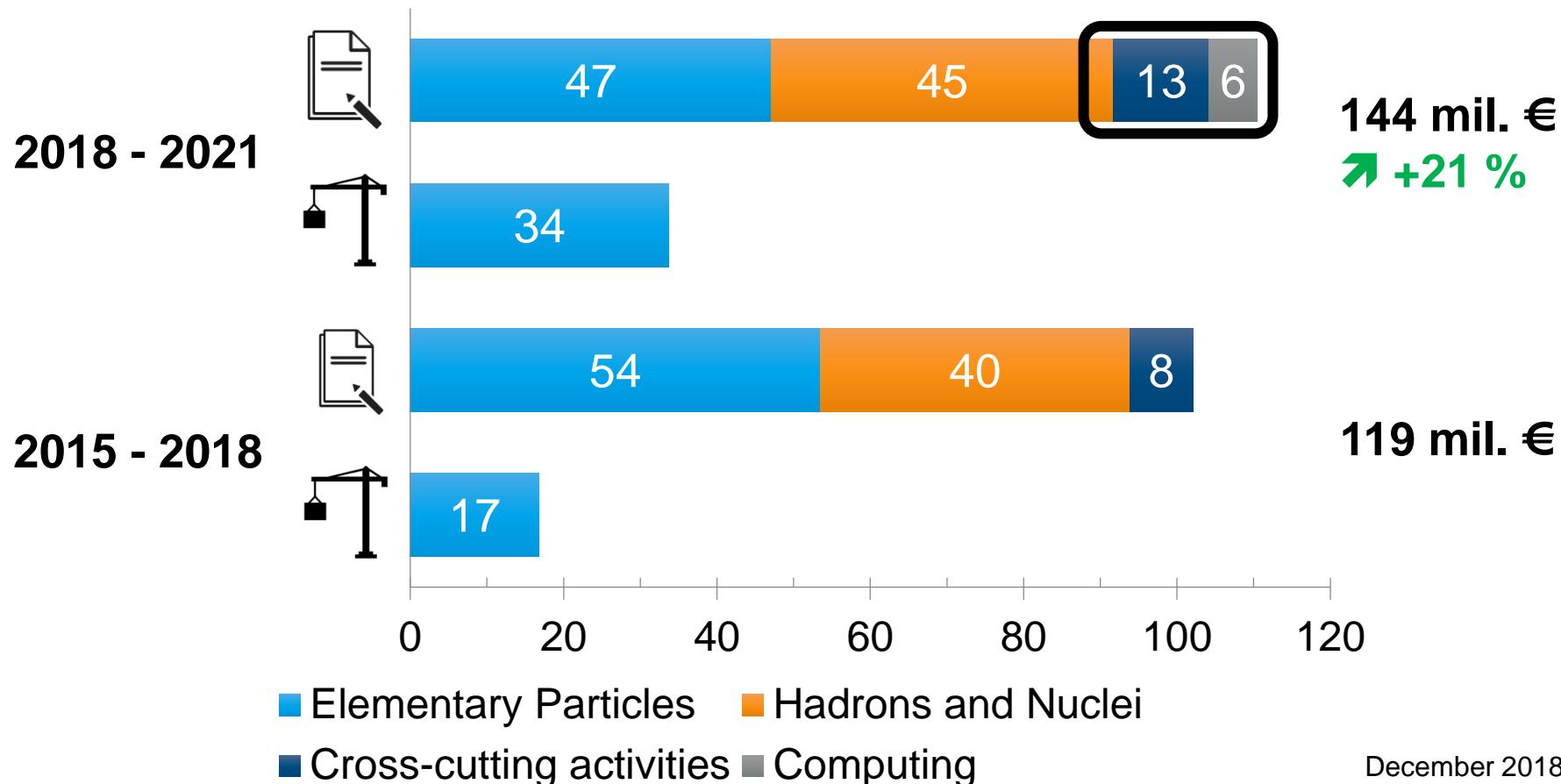
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Physics of the smallest particles



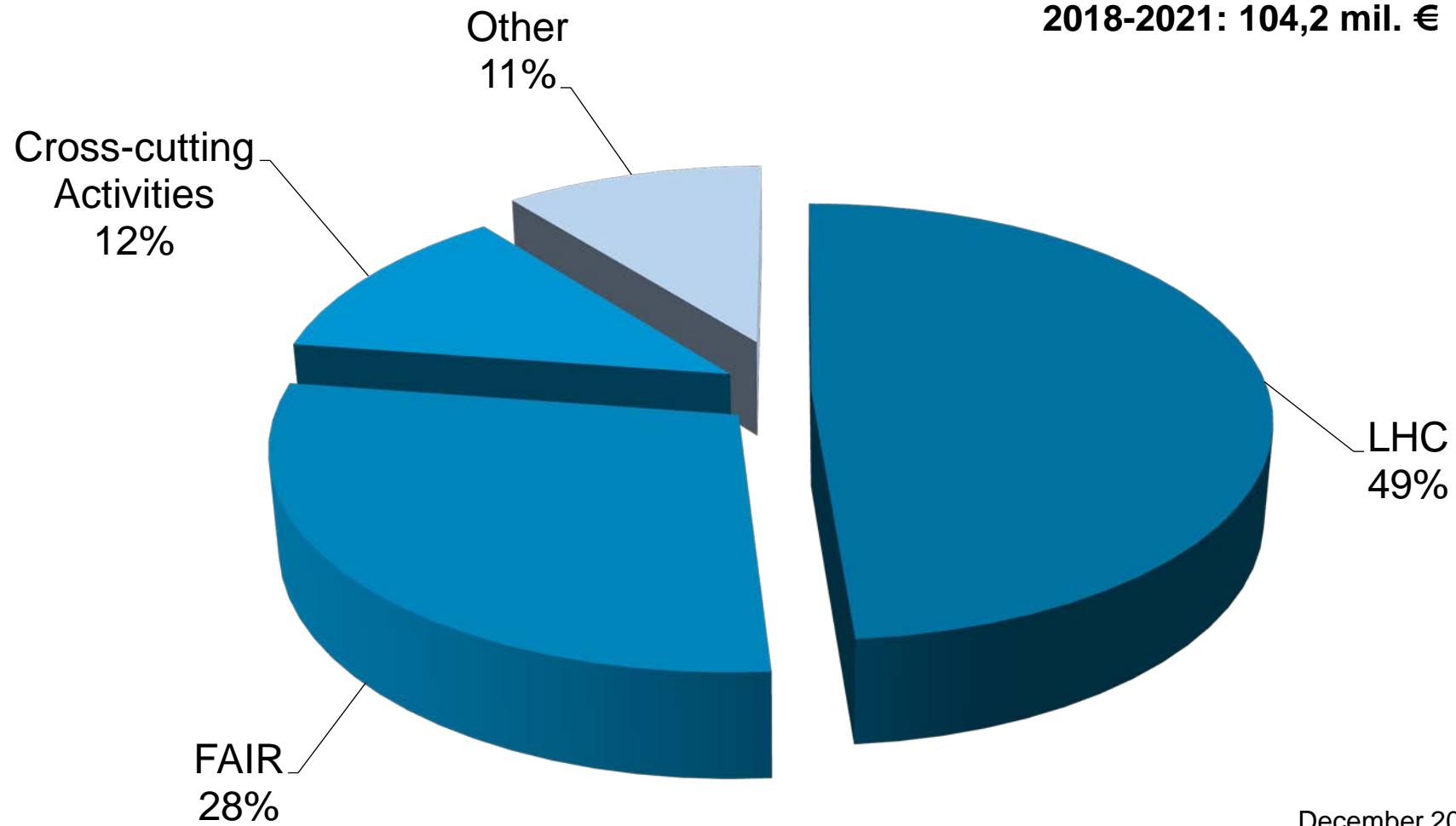
Physics of the Smallest Particles

Evolution of BMBF priorities



Physics of the Smallest Particles

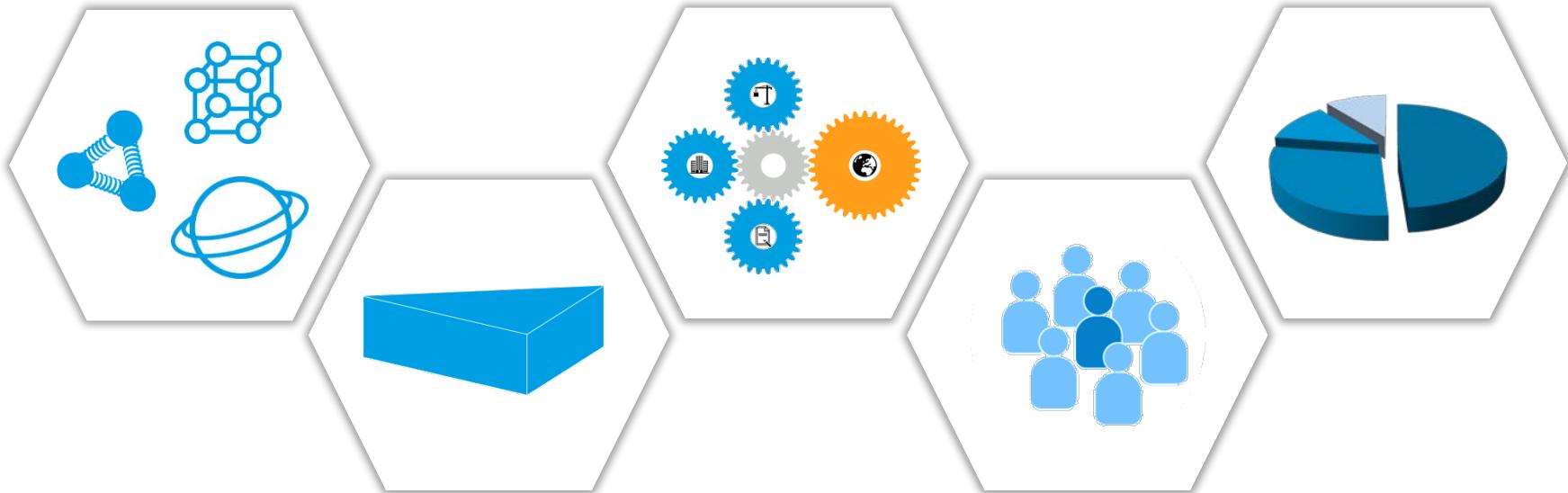
Funding related to research infrastructures



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Thank you

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