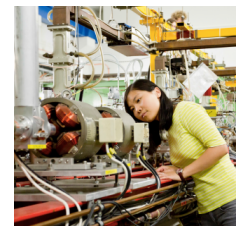
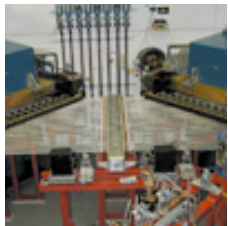


**‘The strong interaction at the frontier of knowledge:
fundamental research and applications’**



TA2 – Transnational Access to MAMI

Achim Denig

JGU Mainz

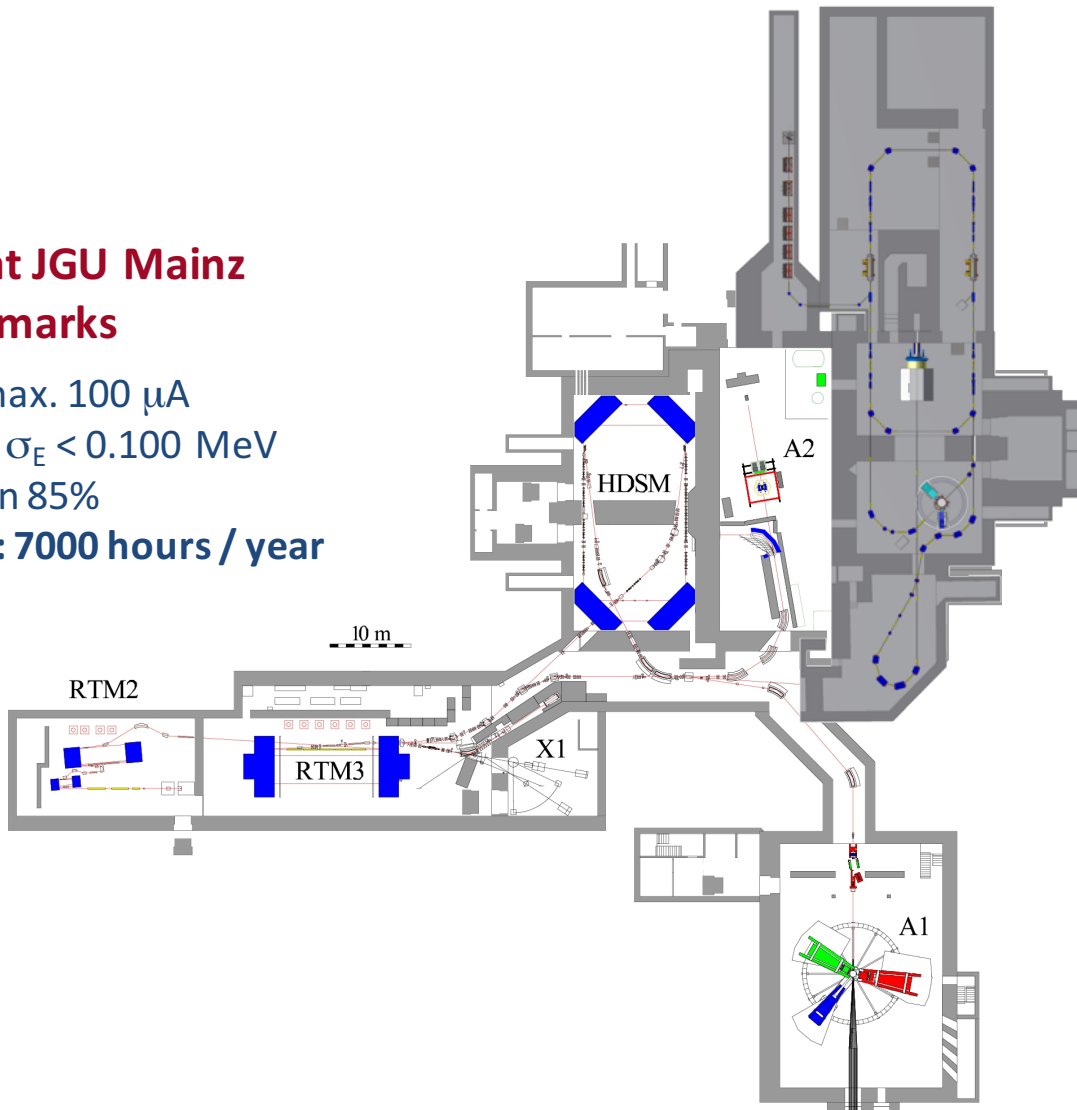
STRONG-2020 Kick-off meeting

October 23-25, 2019



Operated at JGU Mainz MAMI Hallmarks

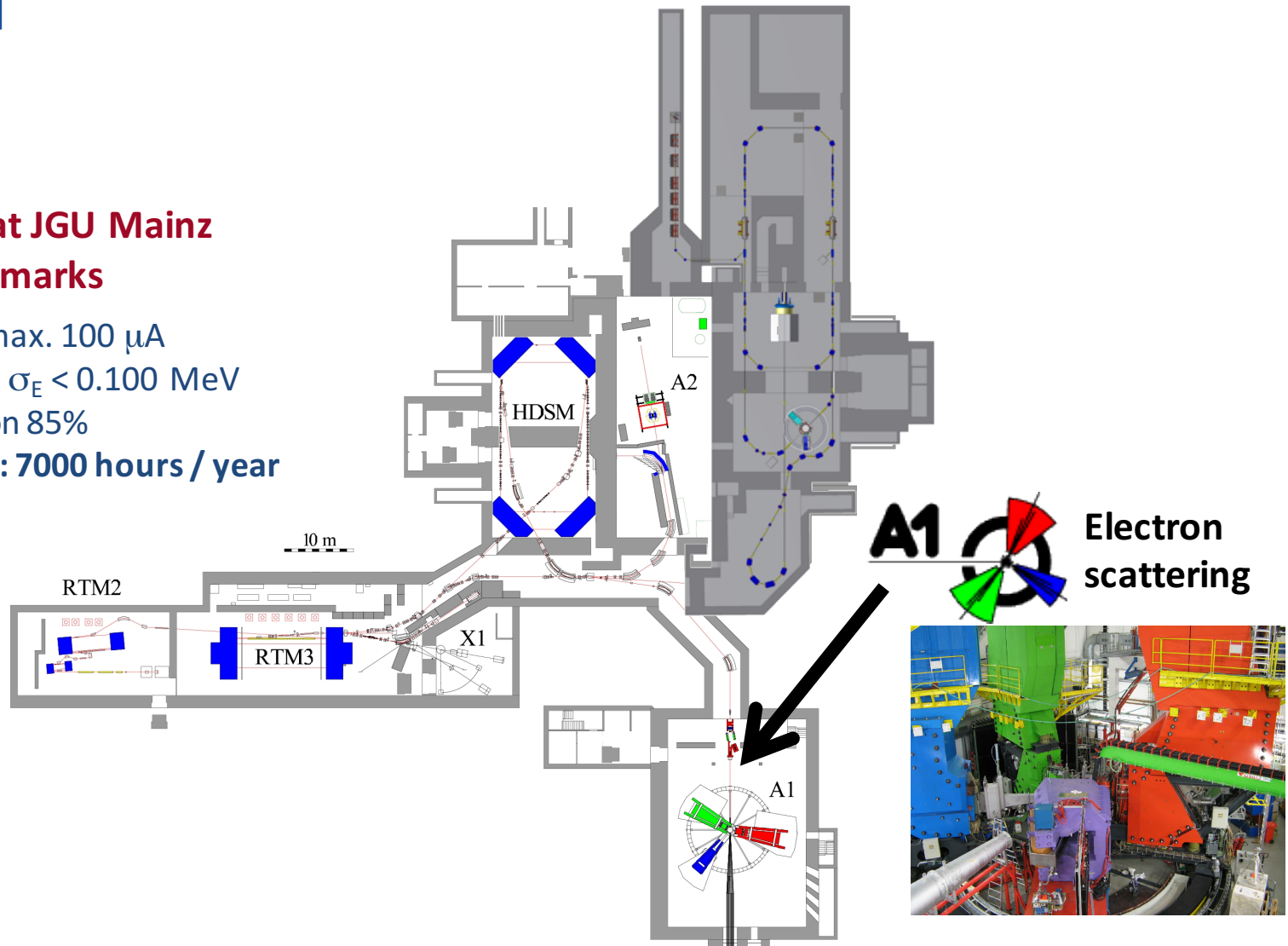
- Intensity max. $100 \mu\text{A}$
- Resolution $\sigma_E < 0.100 \text{ MeV}$
- Polarization 85%
- **Reliability: 7000 hours / year**





Operated at JGU Mainz MAMI Hallmarks

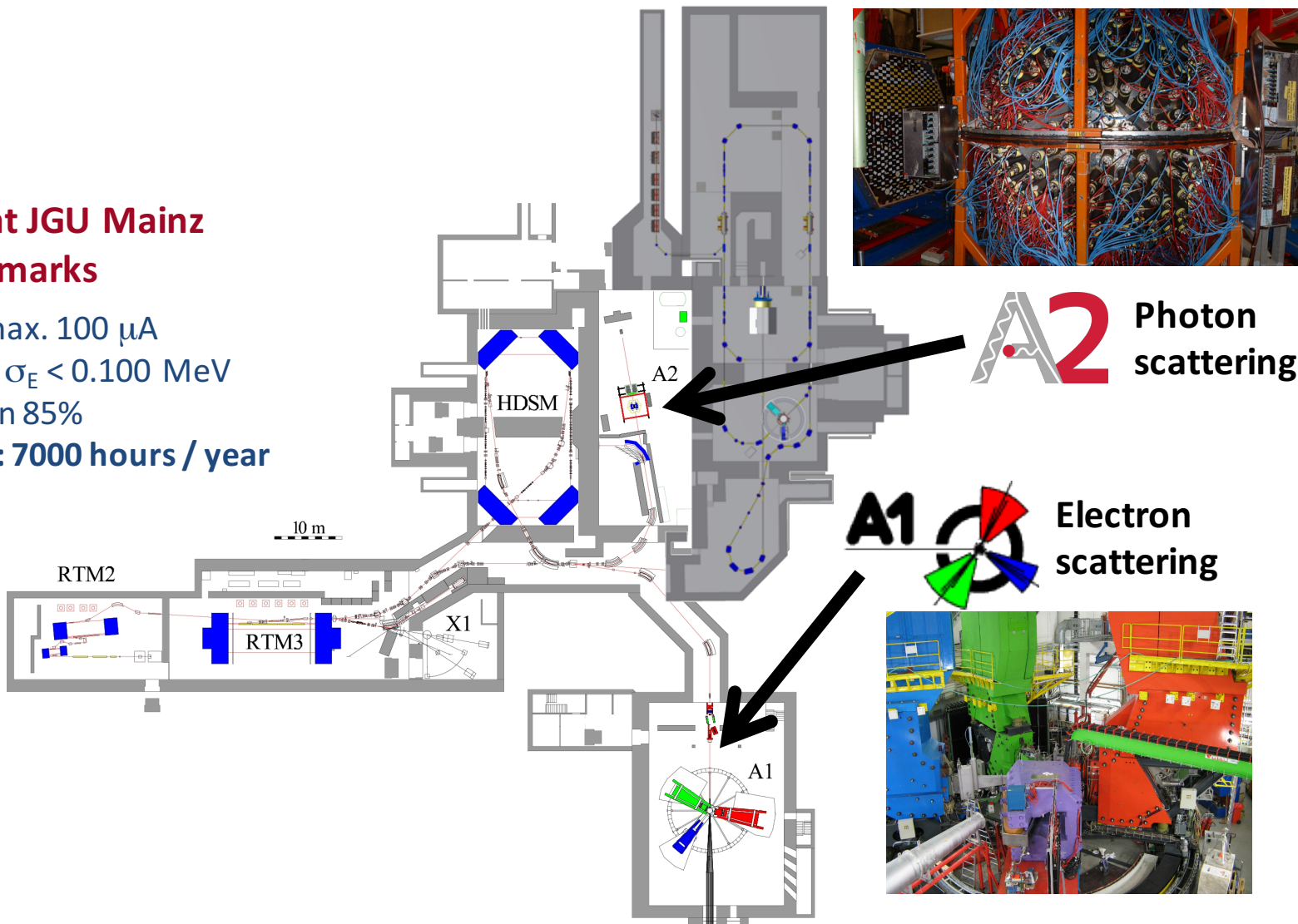
- Intensity max. $100 \mu\text{A}$
- Resolution $\sigma_E < 0.100 \text{ MeV}$
- Polarization 85%
- **Reliability: 7000 hours / year**





Operated at JGU Mainz
MAMI Hallmarks

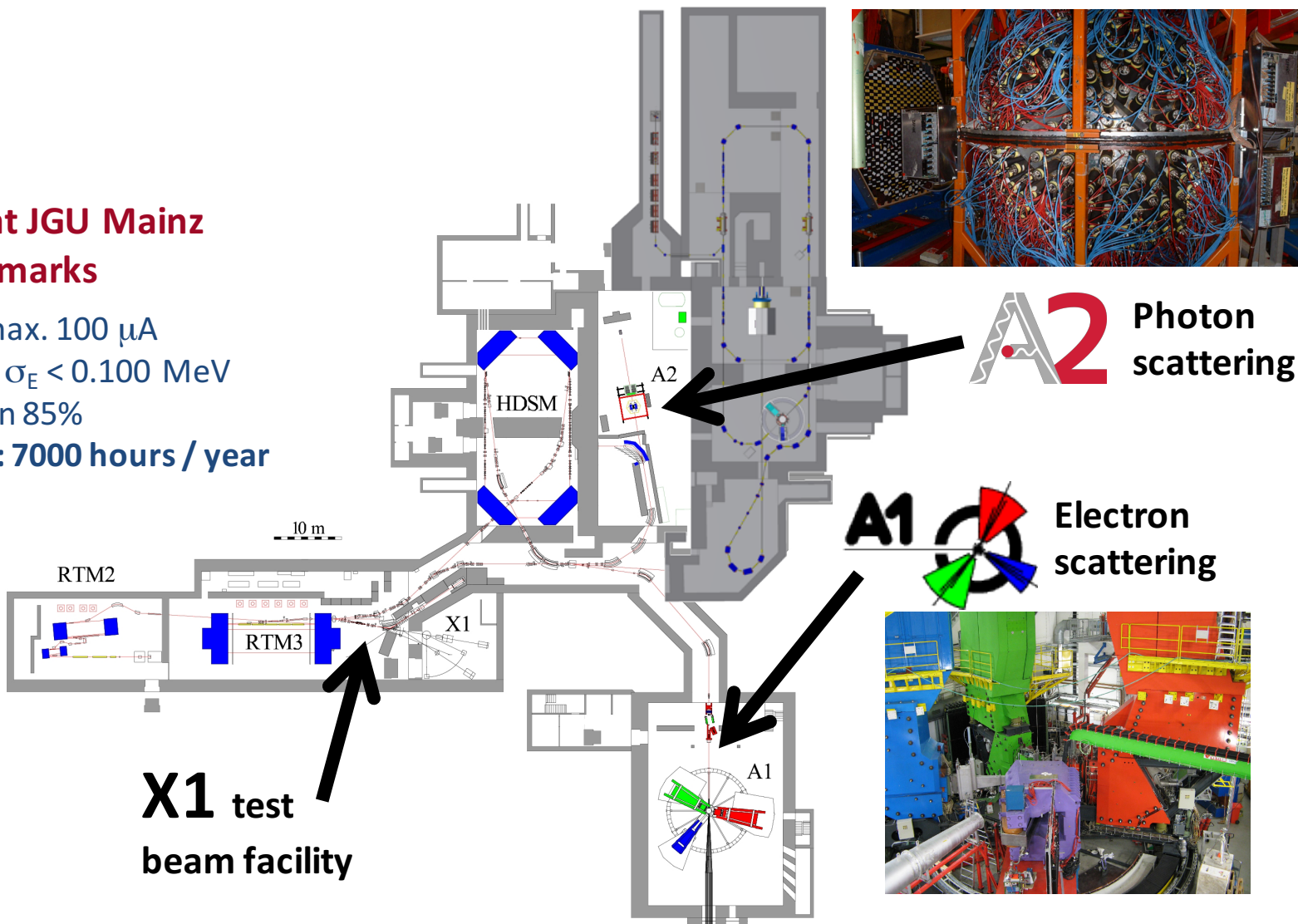
- Intensity max. 100 μ A
- Resolution $\sigma_E < 0.100$ MeV
- Polarization 85%
- **Reliability: 7000 hours / year**





Operated at JGU Mainz
MAMI Hallmarks

- Intensity max. 100 μ A
- Resolution $\sigma_E < 0.100$ MeV
- Polarization 85%
- **Reliability: 7000 hours / year**



State Rheinland-Pfalz

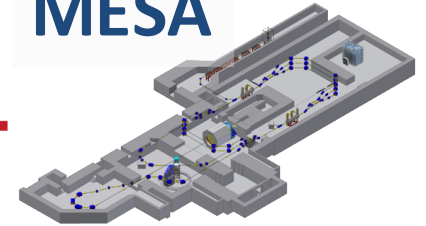


State Rheinland-Pfalz



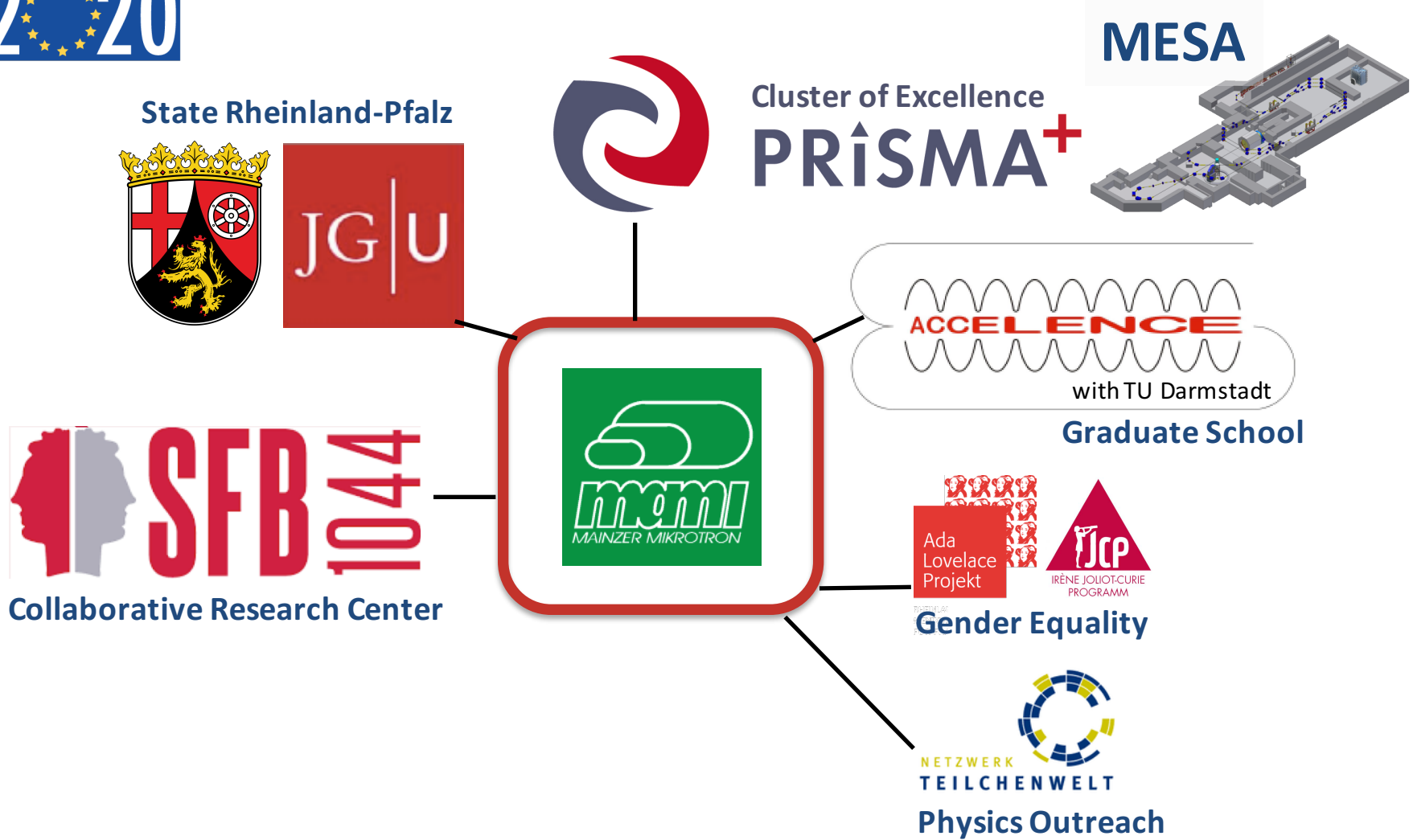
Cluster of Excellence
PRISMA+

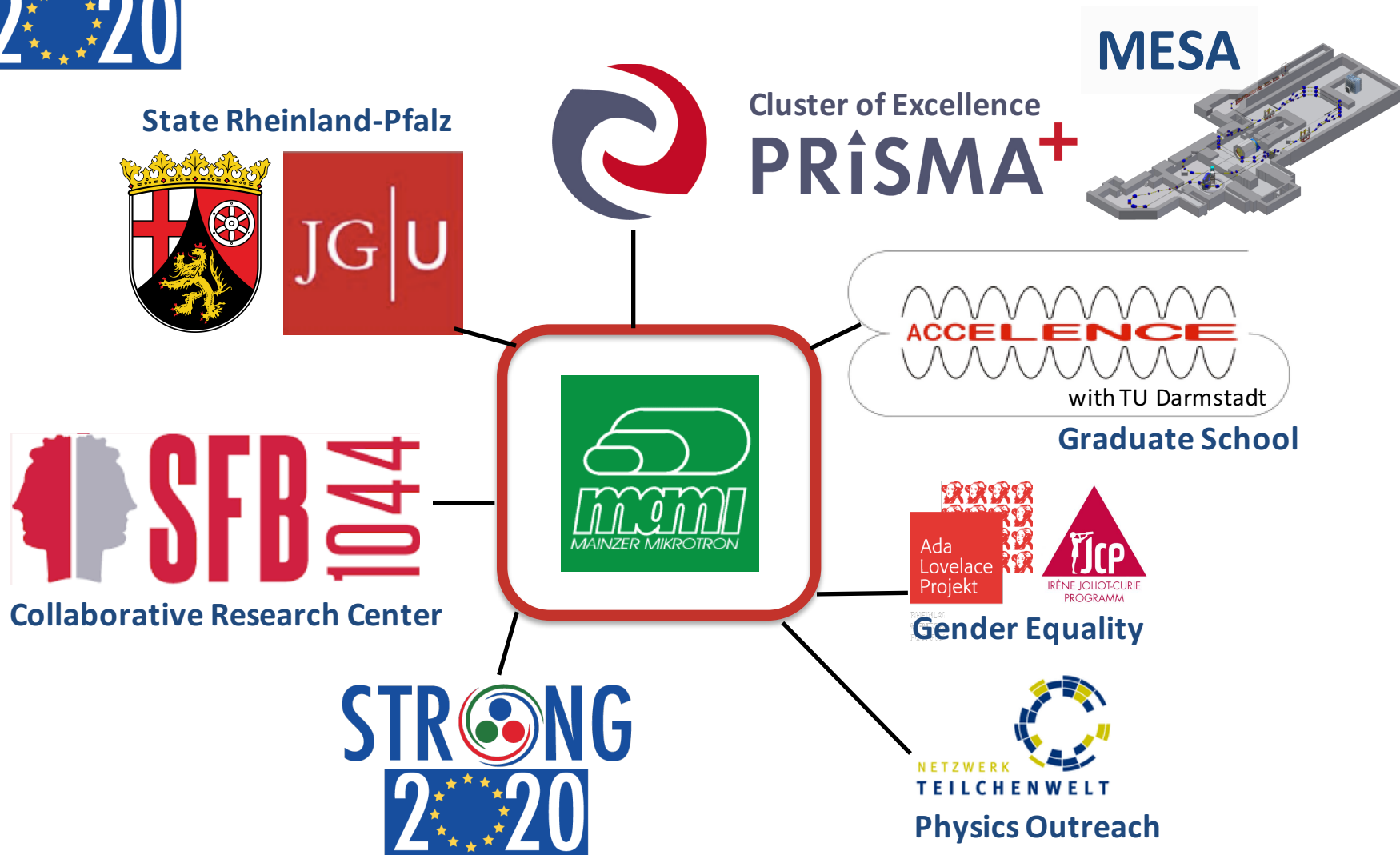
MESA



Collaborative Research Center



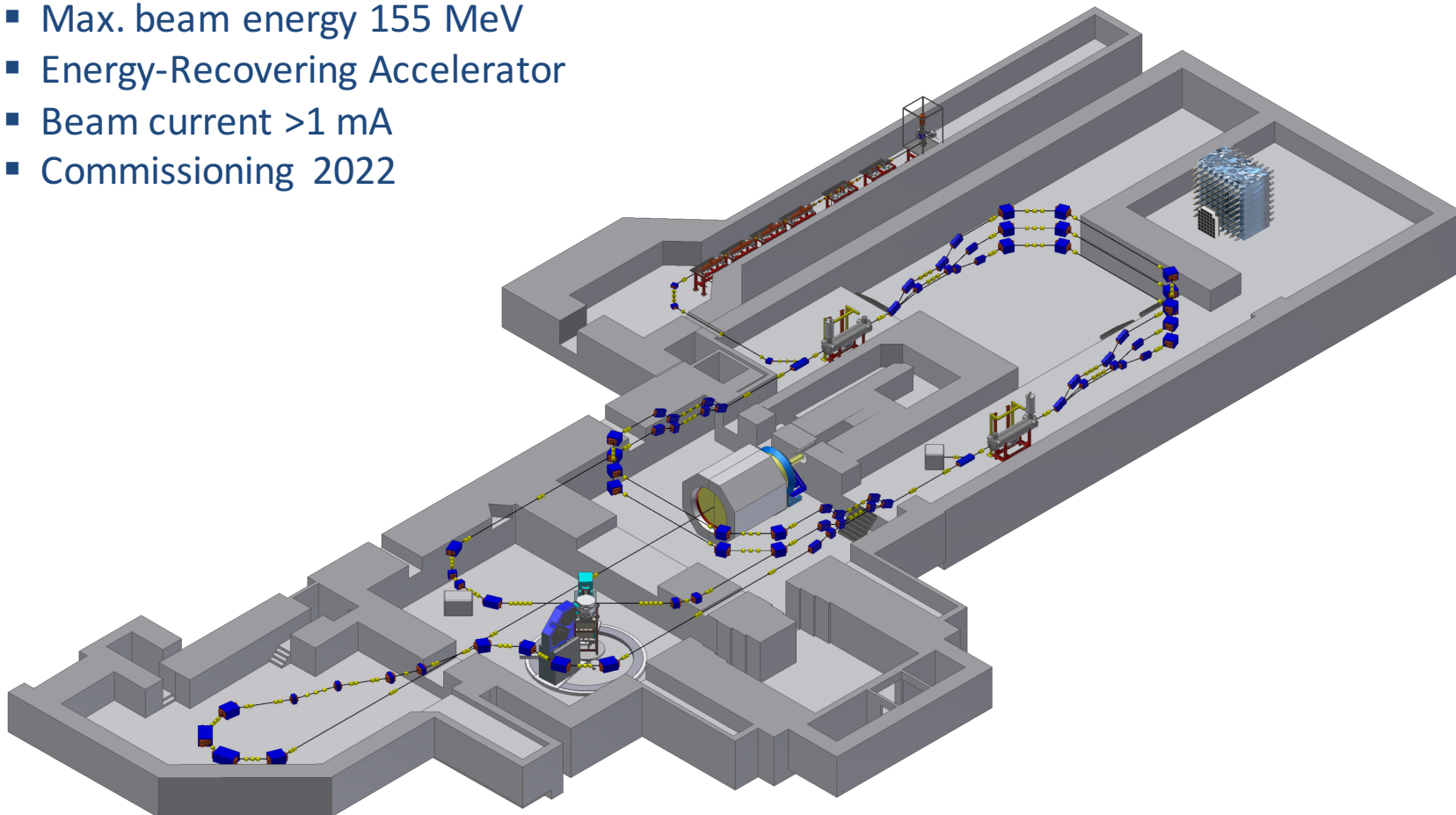


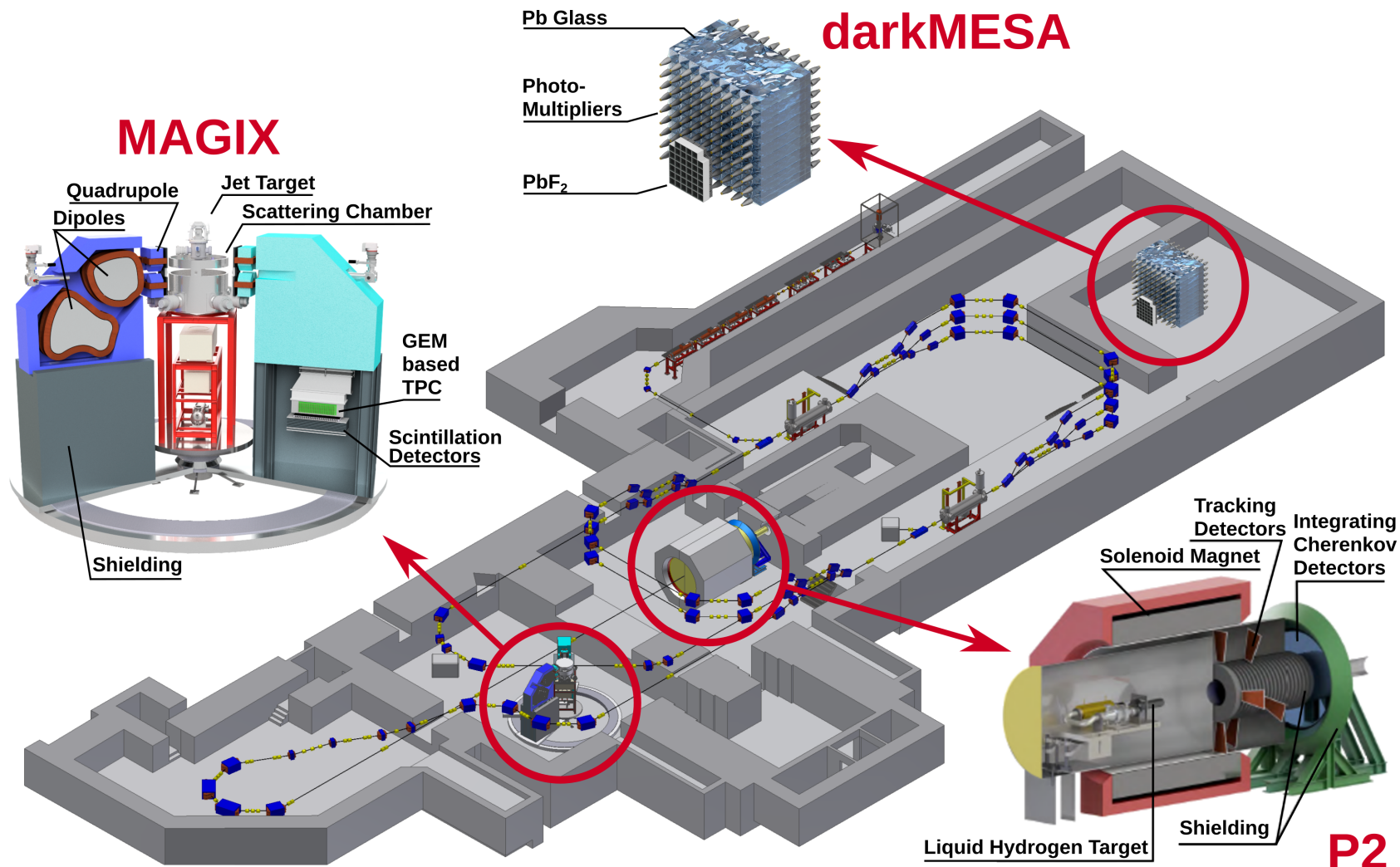


1 TNA, 3 Networks, 5 Joint Research Activities

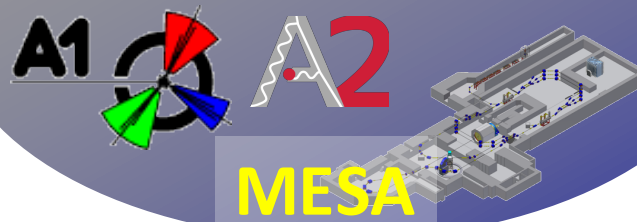
Key parameters electron accelerator MESA

- Max. beam energy 155 MeV
- Energy-Recovering Accelerator
- Beam current >1 mA
- Commissioning 2022

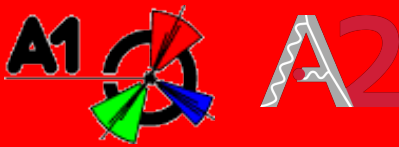




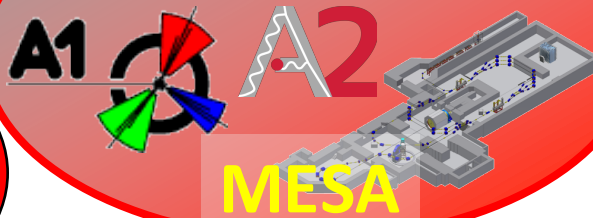
Nucleon Structure



Hadron Spectroscopy



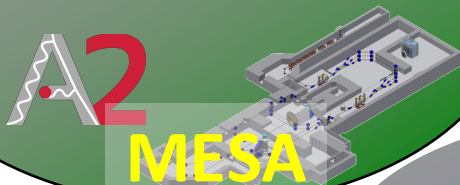
Nuclear Structure



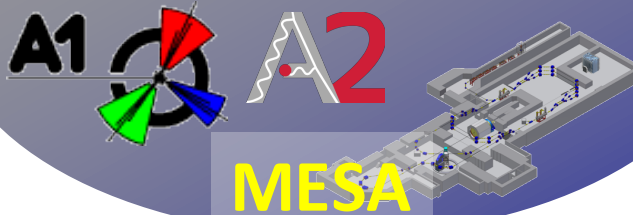
Hypernuclear Physics



Electroweak Precision Tests of SM



Nucleon Structure



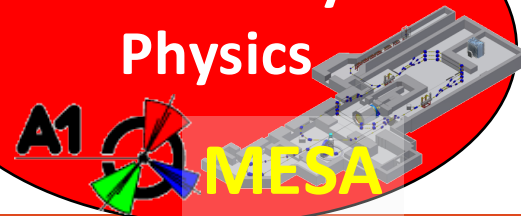
Dark Sector Searches



Spin Physics

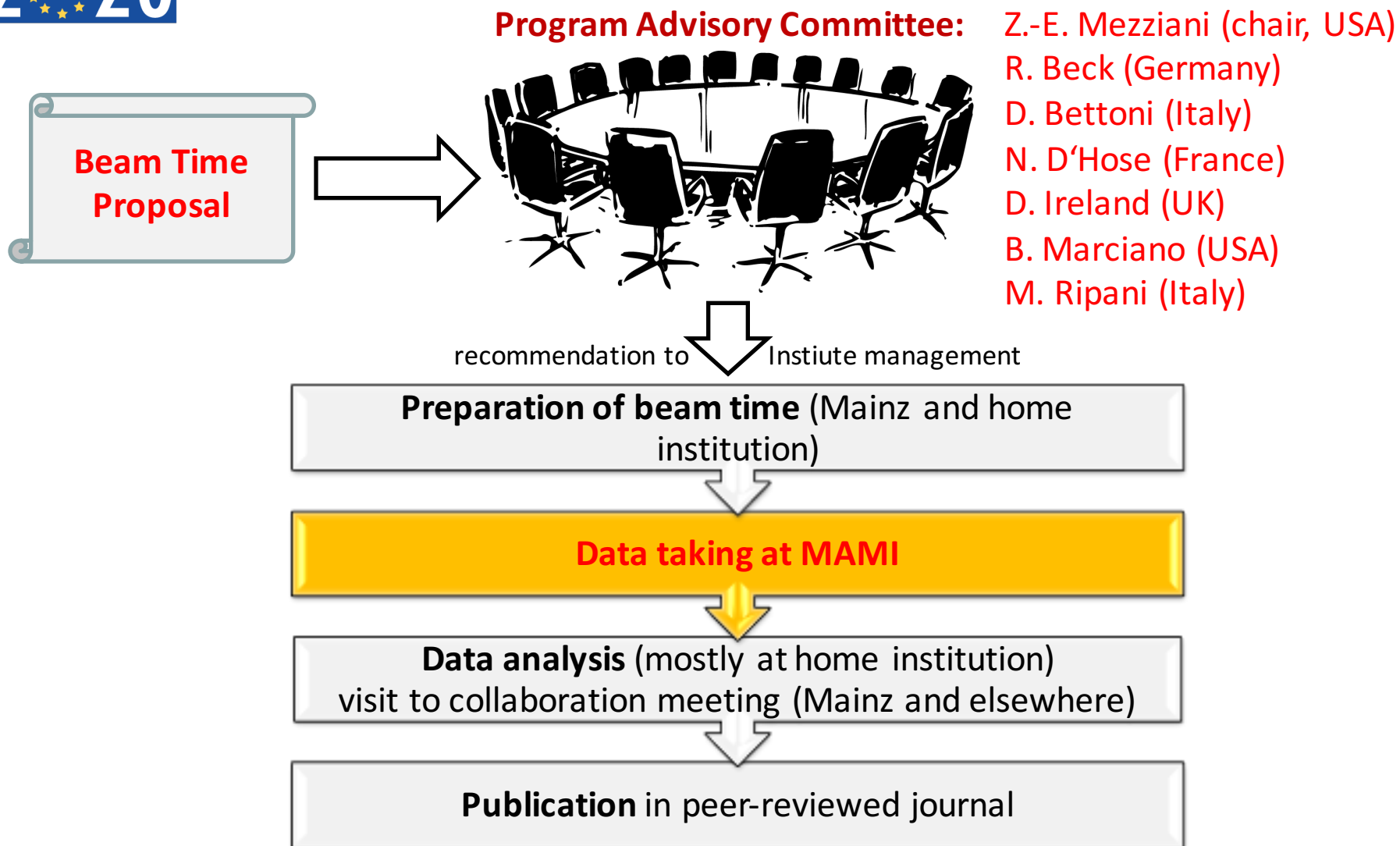


Few Body Physics





Beam Time Procedure at MAMI



Working Package	Local Responsible	External Leading Group	External Responsible
Nuclear S-Factor (A1)	Harald Merkel	Zagreb	Damir Bosnar
Nucleon Form Factors (A1/A2)	Harald Merkel	Zagreb	Damir Bosnar
Nuclear Structure (A1)	Harald Merkel	Ljubljana	Simon Scirca
Meson Form Factors (A2)	Andreas Thomas	Pavia	Paolo Pedroni
Nucleon Polarizabilities (A2)	Michael Ostrick	Glasgow	Dave Ireland
Meson Decays (A2)	Michael Ostrick	Pavia	Paolo Pedroni
Neutron Skin (A1/A2)	Andreas Thomas	Basel	Bernd Krusche
Detector Tests (A2)	Andreas Thomas	Glasgow	Ken Livingston
Radiation Physics (X1)	Werner Lauth	Ferrara	Andrea Mazzolari



News / Press

Institute's Profile

Professors

Contact

Staff

Accelerators MAMI / MESA

Transnational Access to MAMI

Who can apply?

How to apply?

Evaluation Procedure

Scope of Access

Financial Support

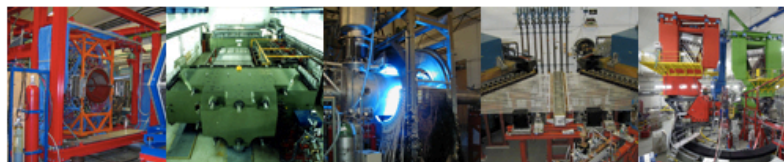
Experiments

Theory

Public Outreach

Research Funding

Transnational Access to MAMI



Within the European Union's Horizon 2020 research and innovation program, the European Union continues to promote, via support for travel and subsistence costs, the access to important European research infrastructures for researchers from countries of the European Union, next to selected other countries. As a participant of the pan-European **STRONG-2020-Collaboration** and its predecessors, the research infrastructure MAMI has offered Transnational Access support since 2004, with the current funding period being 07/01/2019 to 06/30/2023.

The Transnational Access to MAMI addresses research teams and researchers who are interested in the main focus of experimental research at MAMI, namely hadron physics and nuclear physics with the electromagnetic probe, detector physics, accelerator physics and physics with coherent X-rays. Detailed information, e.g. running and planned experimental programs, offers for diploma- and PhD-theses and contact addresses, can be found at the web pages of the **Nuclear Physics Institute/MAMI**, the major experimental collaborations **A1 (electron scattering)**, **A2 (photon scattering)**, **X1 (coherent X-rays)**, the **accelerator group** and the **polarised electrons group** as well as the planned accelerator **MESA**.

Status:

- Administrative procedures at JGU ✓
- Administrative personnel organized ✓
- Website existing ✓
- First trips financed ✓

Contact

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Johann-Joachim-Becher Weg 45
55099 Mainz
Tel.: + 49 (0)6131 39-25830
Fax: + 49 (0)6131 39-23825
E-Mail



- Next PAC meeting scheduled for March 2020
- Months M1 – M18:
650 hours of MAMI beam time to be spent for TA2
(total annual amount of MAMI beam 6000 – 7000 hours)
- A deliverable **“Transnational Access provision - multi annual implementation plan over the first 18 months”** is due for M18 (November 2020)

Overall conclusion:
TA-2 MAMI has started successfully