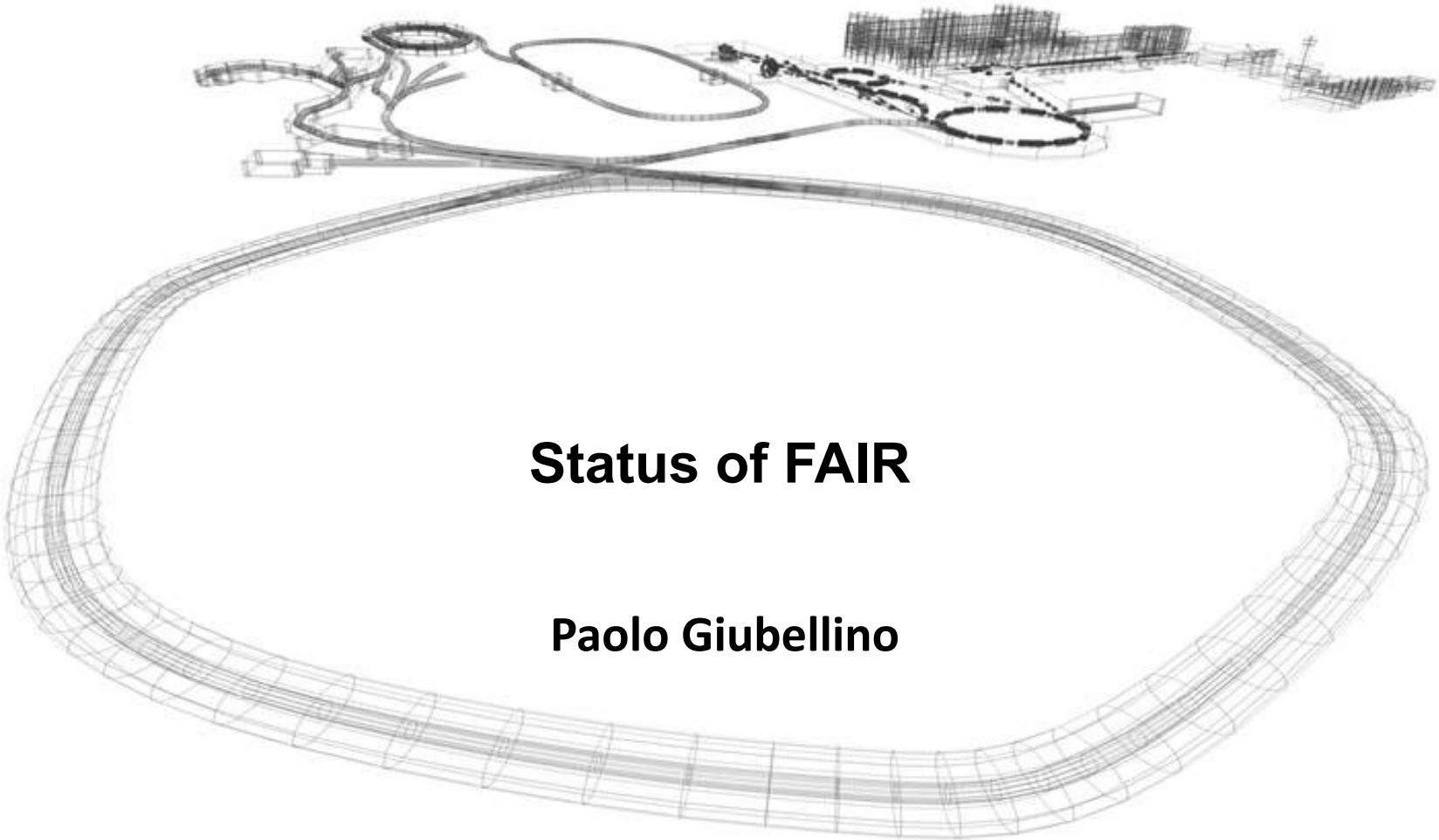
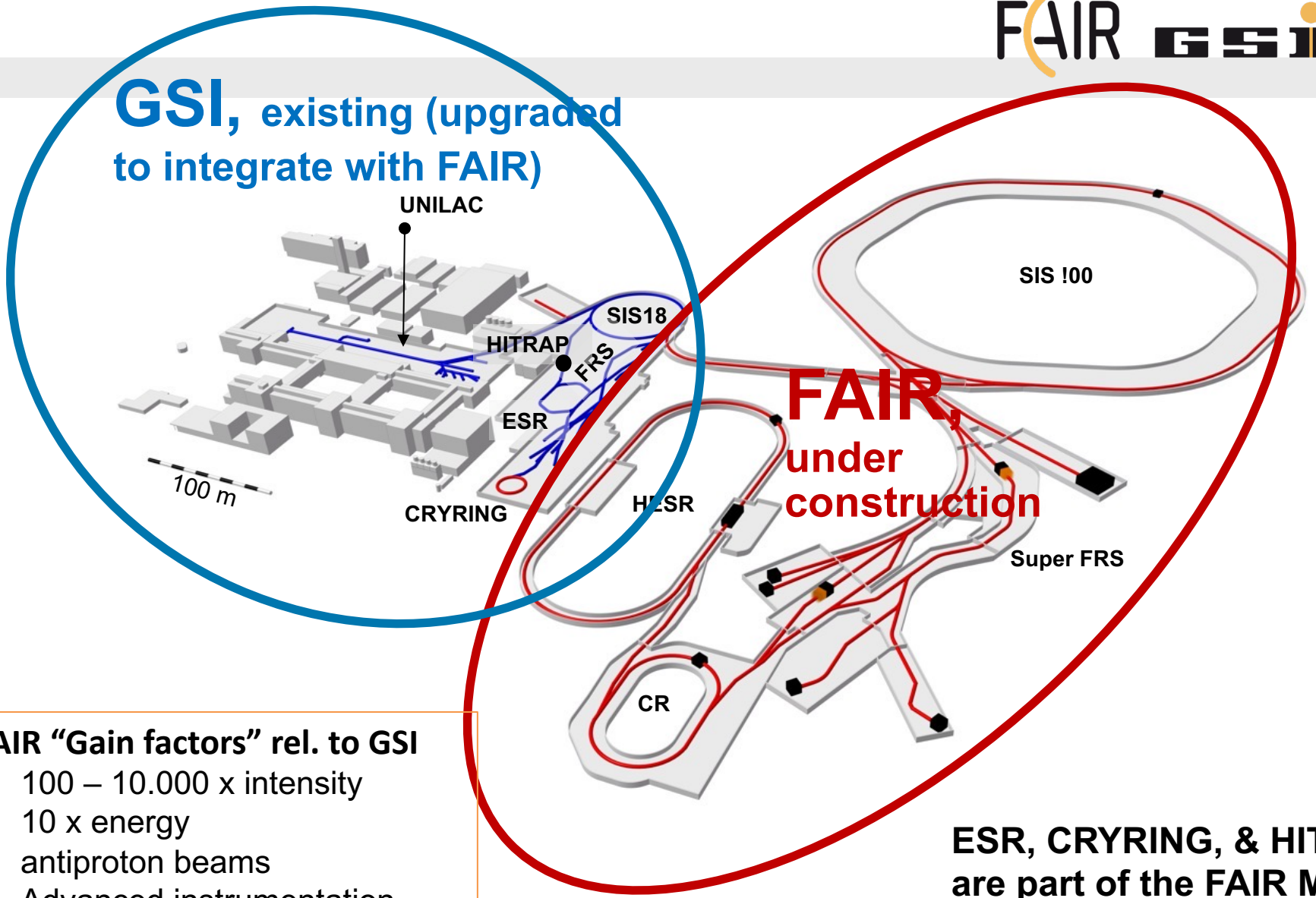


Status of FAIR

Paolo Giubellino

GSI and FAIR



FAIR "Gain factors" rel. to GSI

- 100 – 10.000 x intensity
- 10 x energy
- antiproton beams
- Advanced instrumentation

ESR, CRYRING, & HITRAP are part of the FAIR MSV

Civil construction

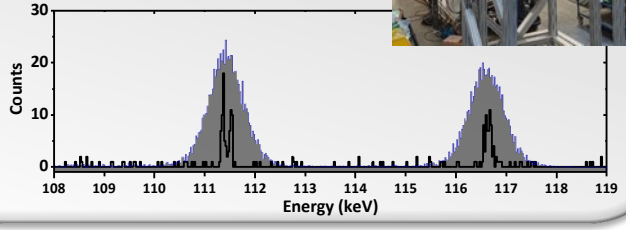
- Civil construction continues to make substantial progress
  - both civil companies (construction area North & South) are performing according to the baseline schedule

→ See next presentation by Jörg Blaurock

Preparations for the experiments by the FAIR collaborations

Recent Highlights

APPA



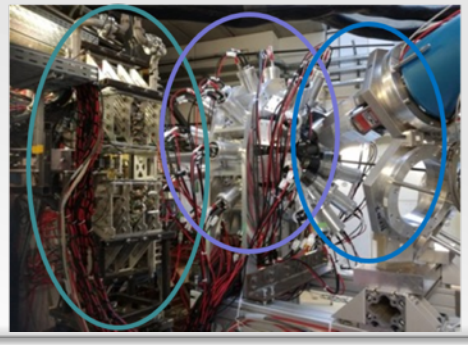
CBM

NUSTAR

AIDA
implantation and decay detector

FATIMA
Fast Timing $LaBr_3$ Array

DEGAS/GTC
HPGe Array



PANDA

→ See presentations by the FAIR collaborations

FAIR Intermediate objective

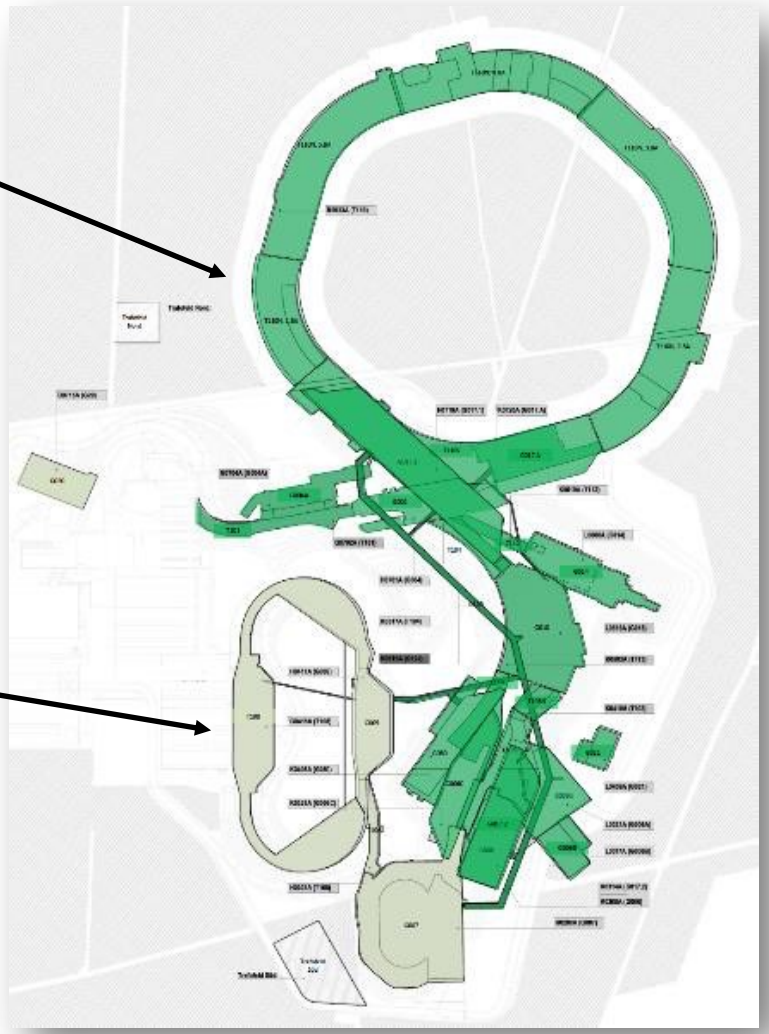
FAIR Council decided in February 2020 the Intermediate Objective (IO) as an interim step towards full MSV.
The IO comprises

- the full scope of accelerator and experiments for the MSV
- the realization of the buildings for MSV except the buildings for CR, HESR and pLinac.

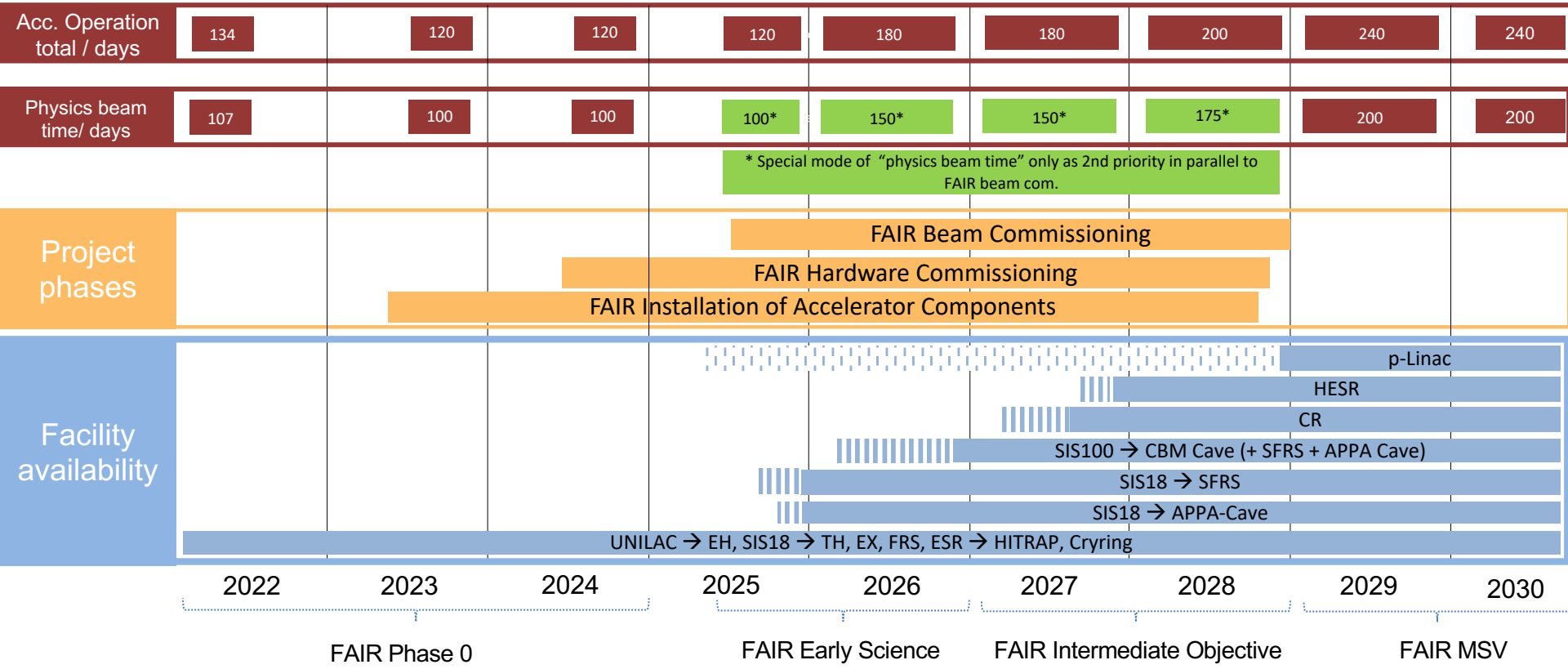
The engineering for the buildings HESR, CR and pLinac is continuing, while these buildings will be realized when funding is approved by FAIR Council.

Start of Early science IO is planned for end 2025 with parts of NUSTAR and APPA Cave.

The completion of IO is foreseen in 2027.



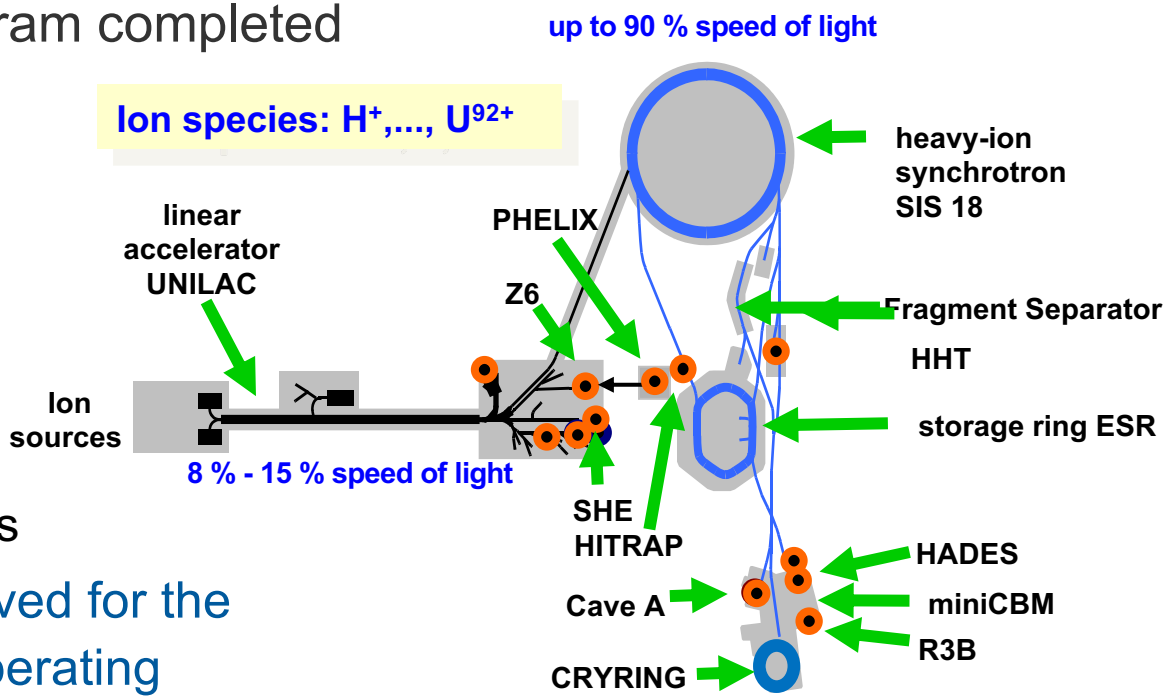
FAIR/GSI strategic operation scenario



FAIR Phase-0 beam time 2021/22

- FAIR Phase-0 2021 Program completed as planned.
- Successful start in 2022

Thanks to excellent preparation of experiments by international collaborations, strong engagement of local people and from the external institutions



- Impressive progress achieved for the accelerator complex (all operating with FAIR control system)
- Until 2024 a block of 3 months beamtime per year.
- The scheme for 2025/2026 is being developed to ensure that the activities will be compatible, giving priority to the commissioning effort

FAIR Phase 0 Research Program

FAIR-Phase 0 future

- Participation in call 2021/22 confirms the very strong interest of the scientific community
- Operational experience gained demonstrates the importance for the future of operation of FAIR
- Will continue with regular beam time allocation until FAIR operations starts
- Next general call in 2022 for beamtime in 2023/24
- We develop an integrated plan of successive improvements to the accelerator complex to expand the scientific reach of the program
  - in 2022: HITRAP

FAIR Phase 0 Research Program

Conclusions

- Construction of FAIR is progressing well
  - Parallel scientific programme (FAIR Phase-0) very successful
  - Planning for installation and commissioning phase now starting
- The funding agencies are asked to consider the funding information provided by the collaborations, comment and if possible seek ways to secure further funds
- Construction Memoranda of Understanding
  - The CBM C-MoU is in execution – thank you very much
  - Draft C-MoUs for PANDA and NUSTAR have been distributed – to be discussed in respective RRBs
- I wish us all a fruitful 11th meeting of the FAIR RRBs

- Thank you very much!