

A wireframe model of the FAIR facility, showing a large circular ring structure and several smaller, more complex structures. The model is set against a background of a colorful nebula with blue, purple, and orange hues, and a field of stars.

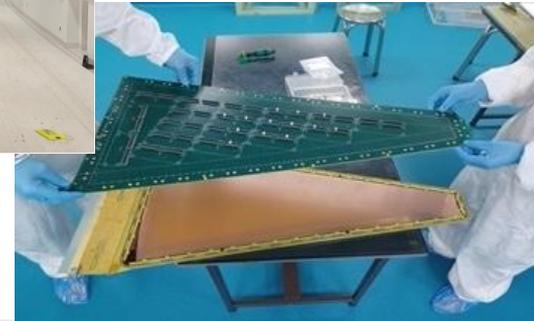
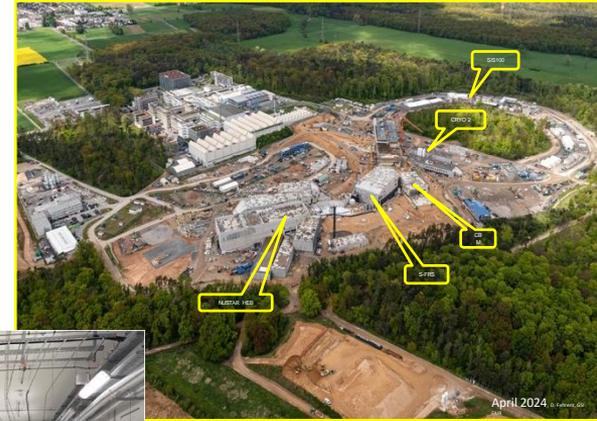
Status of FAIR

Yvonne Leifels

GSI Helmholtzzentrum für
Schwerionenforschung, Darmstadt /
FAIR Facility for Antiproton and Ion Research

Outline

- Introduction
- Civil construction
 - Concrete works completed
 - Cables, ventilation, etc (TBI) ongoing
- Accelerators
 - Installations started beginning of 2024
- Experiments
 - On track for FAIR 2028
- FAIR Commissioning
 - Start in 2025
 - First experiments with Super-FRS@SIS18 end of 2027/2028



New management team



Prof. Dr. Thomas Nilsson, Scientific Managing
Director of GSI and FAIR

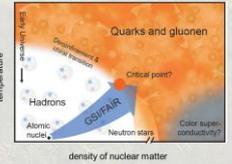
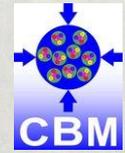
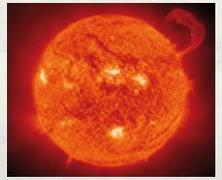
FAIR Facility for Antiproton and Ion Research



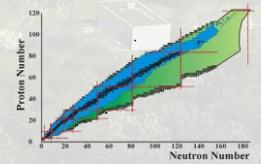
GSI Helmholtzzentrum
für Schwerionenforschung



APPA



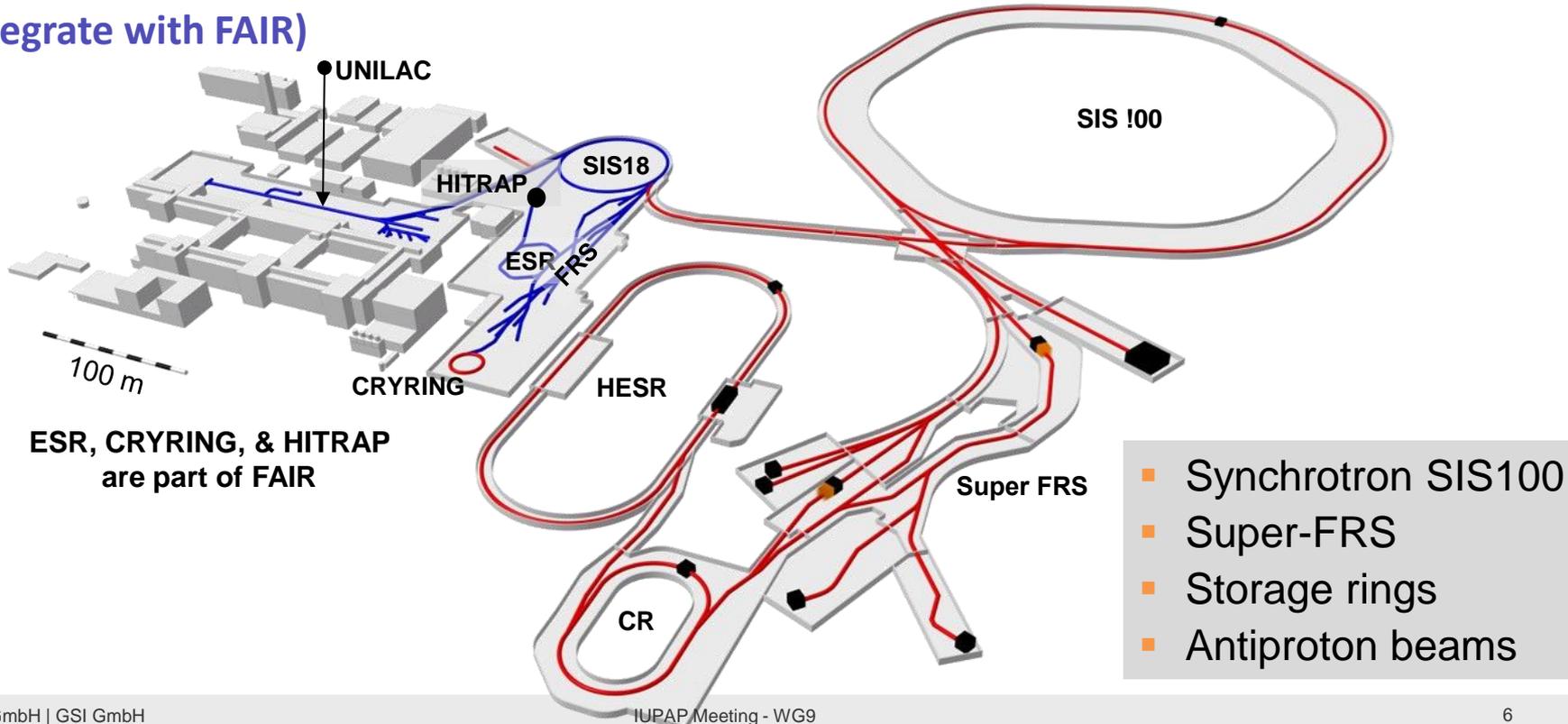
HUSTAR



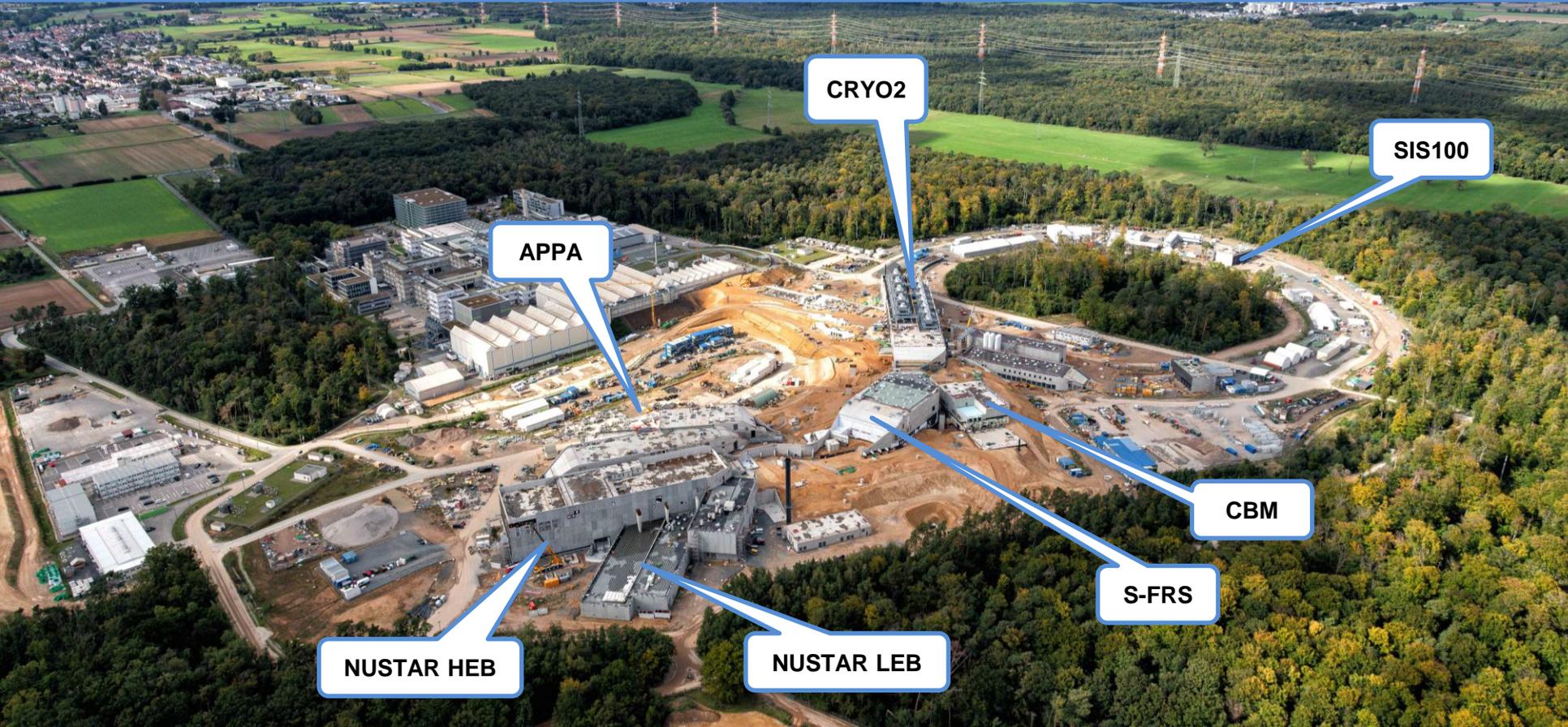
panda



GSI, existing (upgraded to integrate with FAIR)



FAIR Status



APPA

CRYO2

SIS100

NUSTAR HEB

NUSTAR LEB

S-FRS

CBM

FAIR Progress – Civil Construction



View of south area with all buildings completed and soil modelling in progress



FAIR Progress – Civil Construction



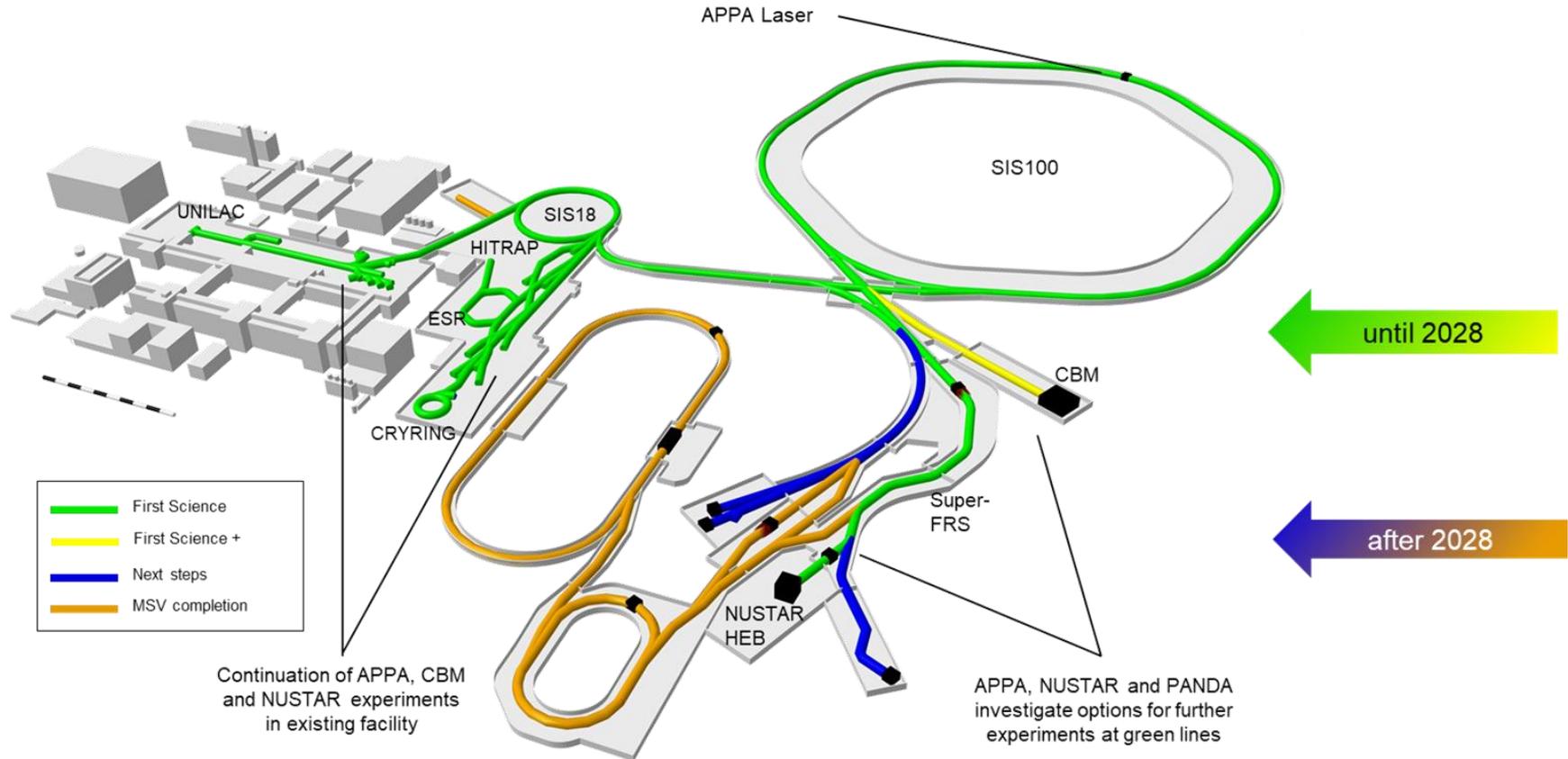
View of north area (SIS100) with all buildings completed



Central transfer building

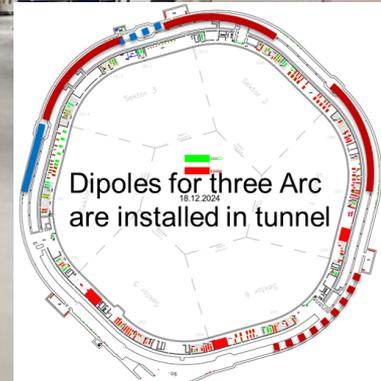


FAIR Project - Current Scope

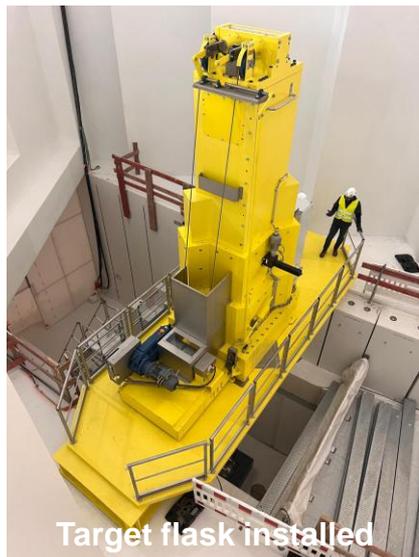


FAIR Progress – Accelerators

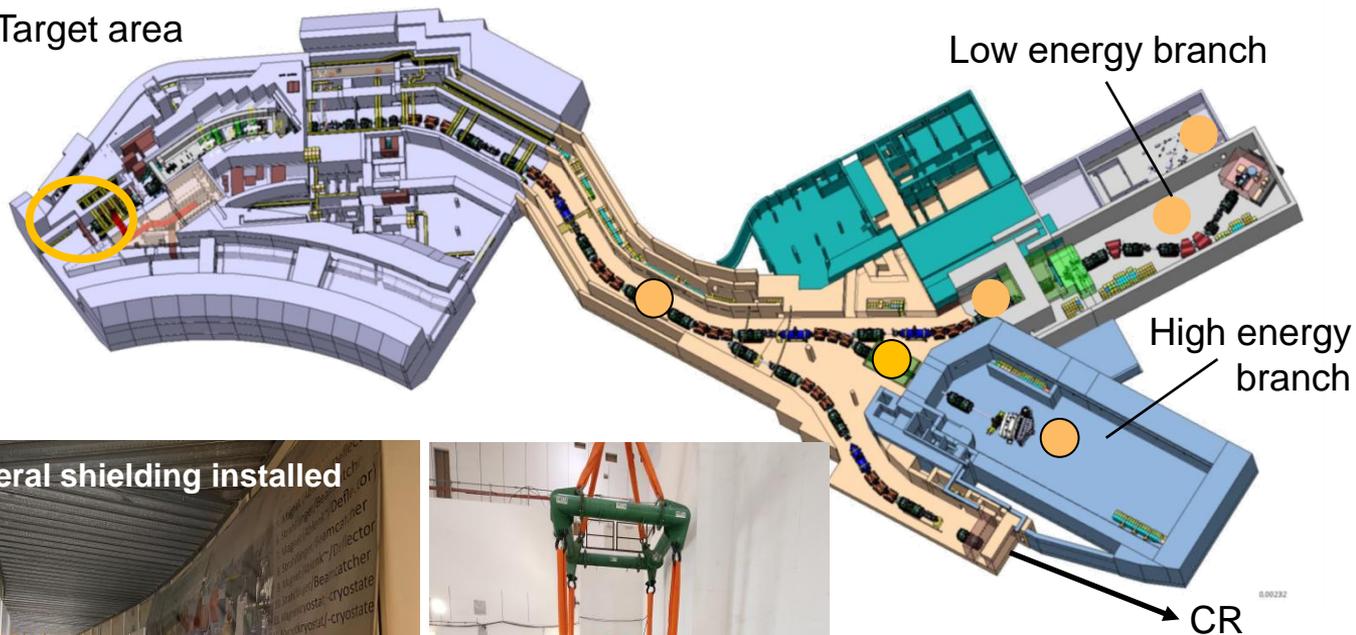
SIS100



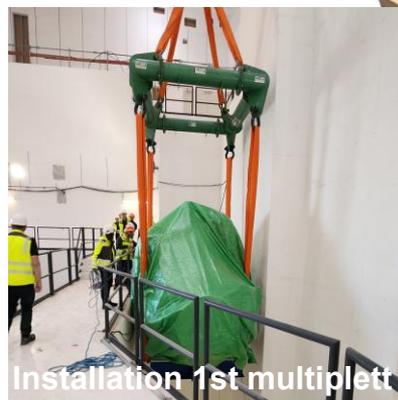
FAIR Progress - Accelerators Super-Fragment Separator



Target area

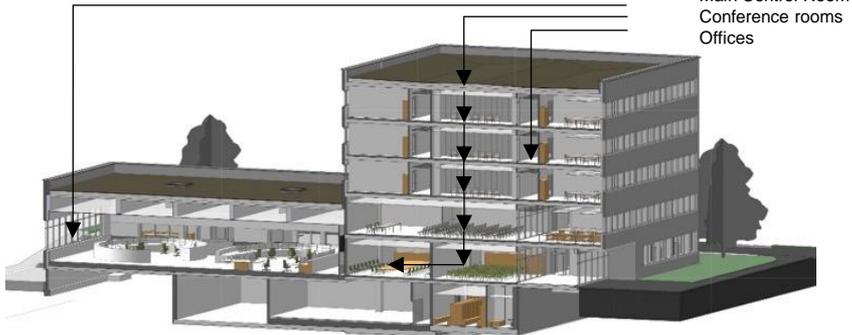


Lateral shielding installed



● Experimental sites

- Main control room for FAIR & GSI accelerators with new FAIR Control System
- **Completion mid 2026**



Experiment platform and magnet foundation
ready for next installation steps

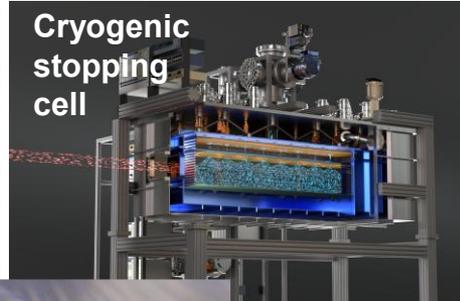
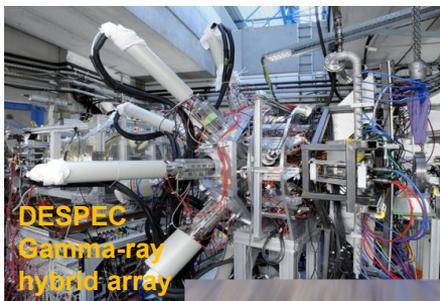
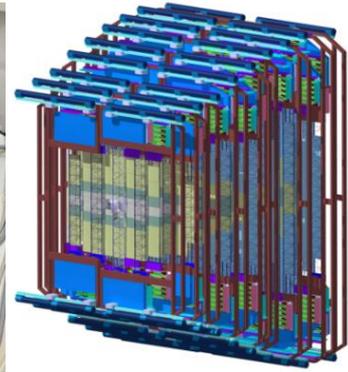
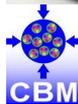
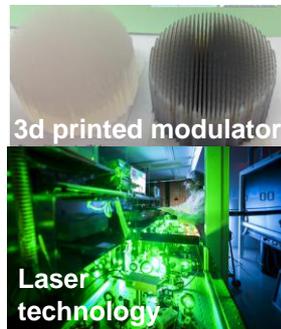


Artistic view of CBM and HADES

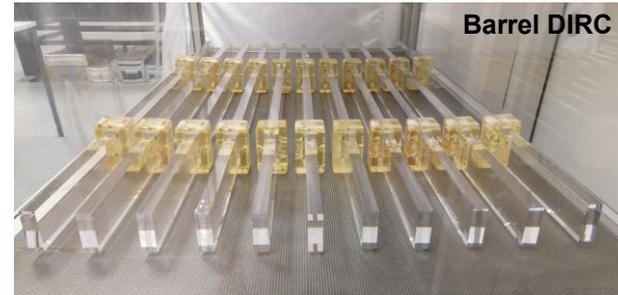
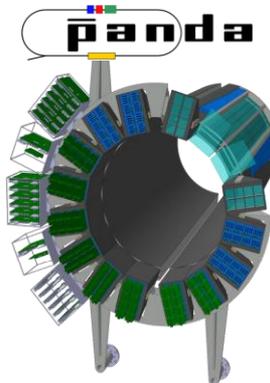
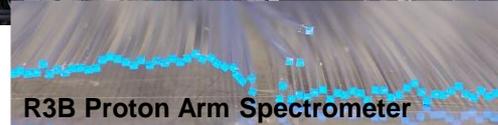


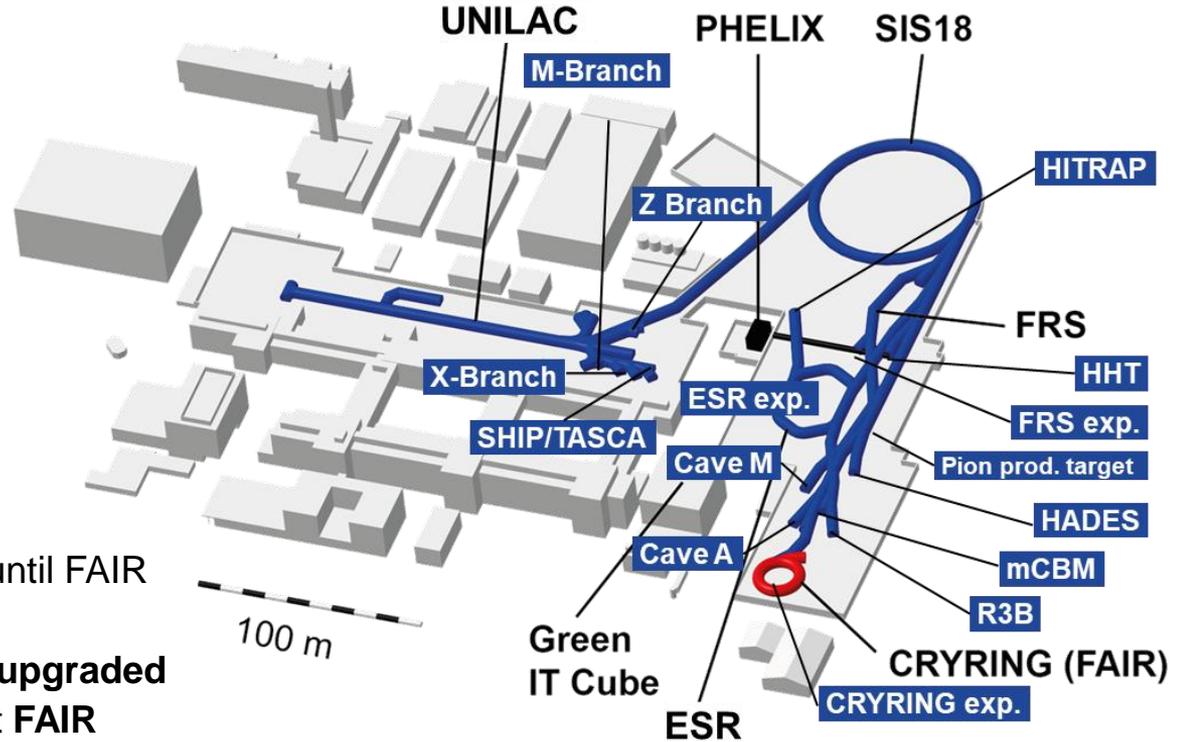
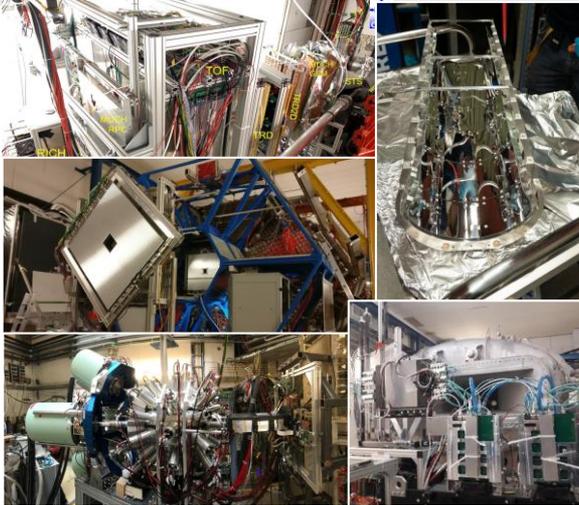
FAIR Progress - Experiments

APPA



NUSTAR

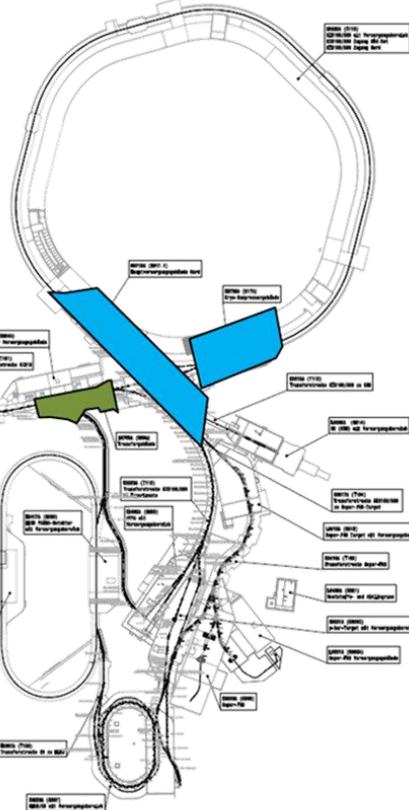




FAIR Phase-0 started in 2019

- 100 days of beam time per year until FAIR starts operation
- Commissioning and operation of **upgraded GSI accelerators** and newly built **FAIR detectors**

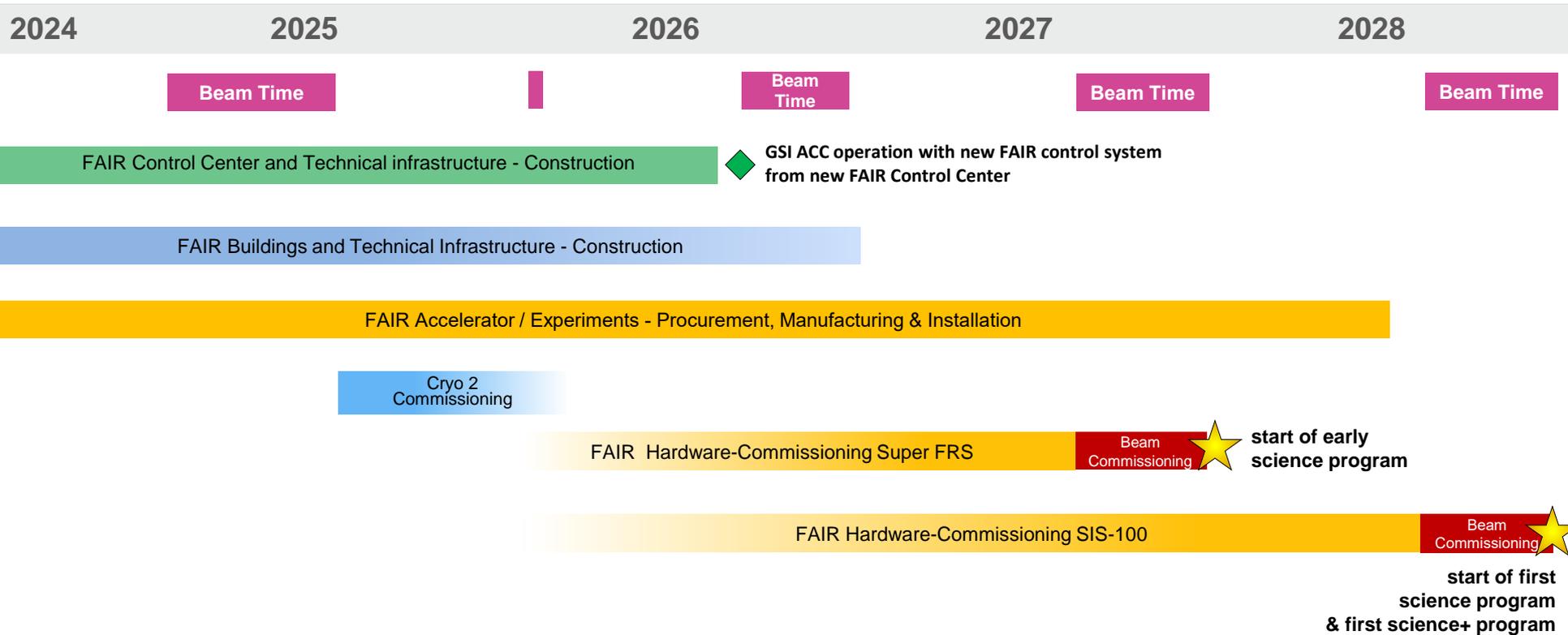
FAIR Progress – Commissioning Start in 2025



- Q3 2025: Start of commissioning of Cryo plant and Cooling water system
- Q4 2025: Initial steps for HEBT commissioning
- Q4 2025: Takeover of main control room in FAIR Control Center (FCC)



Integrated Time Schedule



Thank you!
Questions?

