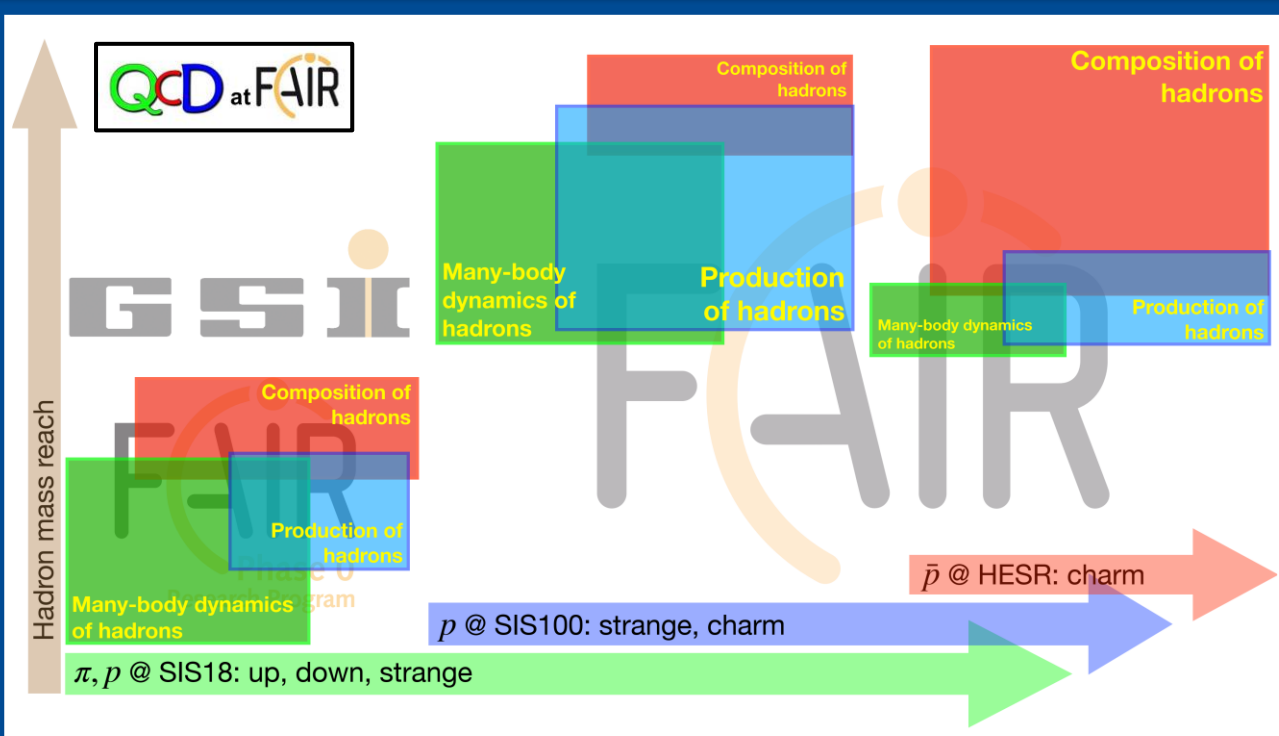


ExtreMe Matter Institute EMMI

EMMI Collaboration Meeting

QCD@FAIR/GSI – Physics Opportunities with Proton and Pion Beams

Catania, Sicily, Italy
June 22-27, 2025



Scientific organisation:

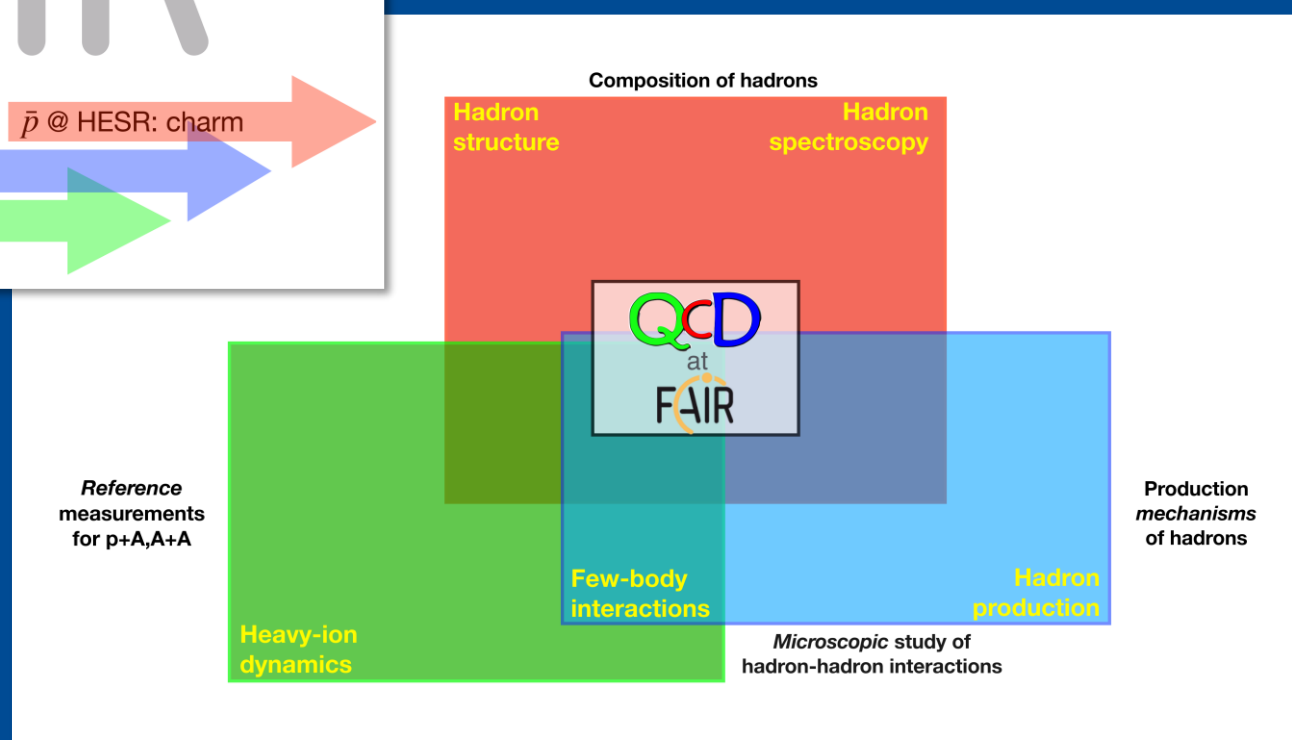
- Frank Nerling,
GSI Darmstadt & GU Frankfurt,
Germany
- Johan Messchendorp,
GSI Darmstadt, Germany

Local organisation:

- Alessandro Pilloni, U Messina &
INFN Catania, Italy
- Isaac Vidana, INFN Catania, Italy

Support:

- Belma Hadzimehmedovic,
GSI Darmstadt, Germany



credits (all images): Frank Nerling, Johan Messchendorp

This event will mark a key milestone in our effort to develop a cross-community-driven hadron-physics program at GSI/FAIR, exploiting the upcoming SIS100 accelerator complex and future experimental facilities such as CBM. This workshop brings together experts from theory and experiment in the field of strong QCD. The proposed physics program aims to deepen our understanding of the fundamental mechanisms of hadron production in exclusively reconstructed reaction processes and serve as a reference for heavy-ion and nuclear physics studies, thereby, creating unique research opportunities across disciplines. The primary goal of the workshop is to finalize the White Paper, ensuring broad consensus on its contents. This will establish a strong foundation for a long-term, sustainable collaboration to drive the hadron physics program at GSI/FAIR over the next decade. It is a follow-up of earlier events that were held in June 2023, February 2024, and November 2024.

Website:

<https://indico.gsi.de/event/QCDatFAIR2025>

Information:

www.gsi.de/emmi/workshops

More about EMMI:

www.gsi.de/emmi

