

The AMBER Experiment at CERN

Tuesday, 17 October 2023 11:30 (20 minutes)

NA66/AMBER has been approved by CERN in 2020 as a new multi-purpose facility for experiments in meson and baryon physics. In a first beamtime in 2023, data have been taken for the determination of antiproton production cross-sections in proton-helium collisions, needed for the interpretation of cosmic antimatter observations. Preparations are ongoing for a measurement of the proton charge radius in high-energy muon-proton scattering. This measurement will feature substantially different systematics than other approaches and aims at clarifying the present discrepancies. Further, experiments to study the partonic structure of mesons in Drell-Yan processes and strange-meson spectroscopy are on the menu of AMBER.

Parallel Session

Future Facilities and Directions

Primary author: FRIEDRICH, Jan (TU Munich)

Presenter: FRIEDRICH, Jan (TU Munich)

Session Classification: Facilities