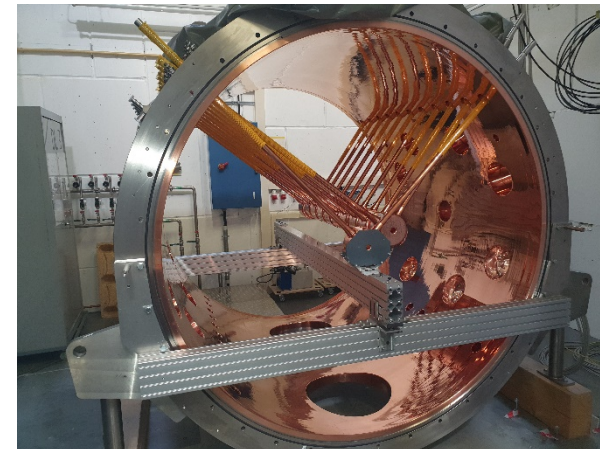
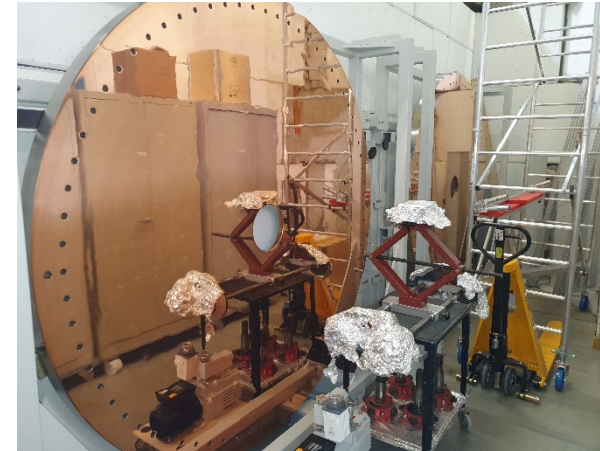


- **FoS:**
  - rf-coupling loops ready to solder to base body
  - half drift tubes for Cu-plating at GALVANO-T
  - plated end plates back to cave Z7
  - tendering / installing media connections to cavity
  - set-up / testing UHV system and data logging
  - installation of plated drift tubes
  - DT study: first magn. measurements meet specs, ongoing
- **Alvarez 2.0:**
  - preparing meeting with GF on launching series tender
- **Pulsed stripper:**
  - valve tests: works at MEWE
  - preparing of H<sub>2</sub> - tests with beam in 2021
  - H<sub>2</sub> bottles ordered
- **ROSE:** preparation of beam time
- **Acc. Seminar:** Thursday: Y. Papaphilippou (CERN): “Acc. Phys. Challenges at CERN”



**ACCELERATOR SEMINAR**

Yannis Papaphilippou  
CERN

Thursday, 4. March 2021 at 4 pm

Online-Seminar via Zoom  
(ID: 951 8940 1151/ PW: 048541)

**Accelerator Physics Challenges at CERN**

The Accelerator and Beam Physics group at CERN leads beam dynamics studies throughout the entire CERN Accelerator Complex, from the source up to the LHC collision point and for future upgrades or new projects. This is achieved through theoretical, numerical and experimental studies, covering linear and nonlinear optics and beam dynamics, halo generation and collimation, cooling, coherent and incoherent collective effects.

This seminar will give an overview of the work carried out by the group for addressing the present and future challenges, namely:

- the LHC Injector Upgrade (LIU) beam commissioning, implementation and performance ramp-up for protons and ions, addressing intensity-brightness limitations such as space-charge and impedance
- the LHC Run III for paving the path towards High Luminosity-LHC (HL-LHC), addressing potential performance bottlenecks with respect to instability thresholds vs impedance model, electron/strahlung/heat loads, beam-beam effects and their mitigation, noise, emittance preservation and the implementation of new collimation concepts (crystals, e-lens)
- the study and development of new concepts for the design of future circular and linear colliders such as FCC, CLIC, Muon Collider, for accelerators to support the exploration of Physics Beyond Colliders, and for accelerators with applications in medicine and industry
- the testing of new acceleration, beam manipulation and measurement techniques in AWAKE and CLEAR accelerator test facilities
- the development and support of accelerator physics computer codes using state of the art algorithms and high-performance computing resources in order to fulfil the above-mentioned beam dynamics needs

Coordinator: Anja Seibel, Janet Schmidt  
Secretary: Larissa Berti  
<https://indico.cern.ch/event/951894/contributions/426618-426622>

**GS1** **FAIR**