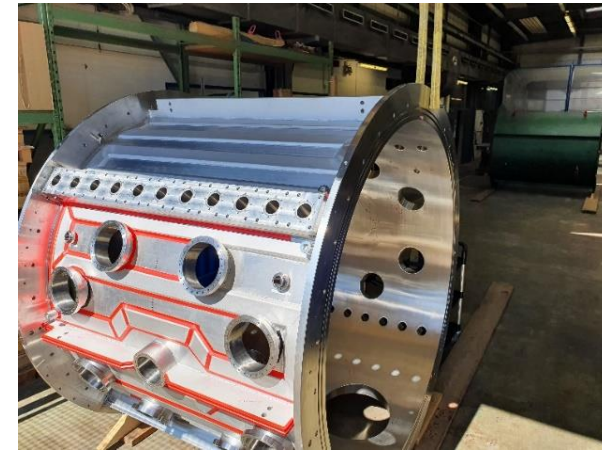


MM 08.09.2020

- **FoS:**
 - production of static tuners and rf-coupling loop
 - pow. conv. for quadrupoles
 - tendering ongoing
 - anticipated procurement of pieces started
 - design of dynamic tuners
 - preparation of hprf-testing
 - dummy: Cu-layer evaluated -> too thin, counter measures defined
 - FoS-plating: preparation of masking
 - DT-study delay of three weeks expected:
 - delivery of faulty component from sub-supplier
 - request for budget transfer of 75 k€ 2020 -> 2021
- **Alvarez 2.0:**
 - refining resource loading of MSP plan
 - clarify with purchase office anticipated works w.r.t. series tendering
- **pulsed stripper:** placing orders for external consultant and fast valves
- **injector controls:** exchanging of TCLs in MCR console
- **acc seminar on Thursday:** B. Haerer (KIT): “short e-bunches for sSTART“



ACCELERATOR SEMINAR

Bastian Haerer
KIT

Thursday, 10. September 2020 at 4 pm

Ort: KBW Hörsaal and Zoom-Meeting Room
(ID: 945 1206 6792 / PW: 645661)

A transferline delivering ultra-short electron bunches for the cSTART project

The compact Storage ring for Accelerator Research and Technology cSTART is a test facility which is currently being designed by the Institute for Beam Physics and Technology at KIT. The goal of cSTART is to investigate novel techniques of storing ultra short electron bunches and hereby contribute to the development of a new generation of compact light sources which combine the benefits of linear and circular accelerator facilities, the radiation of short light pulses with a high repetition rate. One of the electron sources will be the Fermifront Linac- und Test-Experiment FLUTE serving as a full energy injector for cSTART, providing bunches with a length of down to a few femtoseconds and stable beam parameters. As a consequence of the spatial arrangement of injector and storage ring, a complex transfer line is required which not only deflects the bunches in both transverse planes but also avoids bunch lengthening and delivers bunches at the injection point with a length in the low fs range. After a brief introduction of the FLUTE and the planned cSTART test facilities, this presentation will focus on the lattice design of the transferline. Both aspects of transverse and longitudinal beam dynamics will be discussed. Dynamic aperture and compression performance have been investigated with tracking simulations.

Coordinator: Anja Seibel, Janet Schmidt
Secretary: Larissa Bittl
<https://zhb.fzka.de/c/accelerator/online/2020-09-10>

GSI **FAIR**