

MM 10.11.2020

- **FoS:**
 - production of static tuners and rf-coupling loop
 - preparation of hprf-testing: cabling, water supplies
 - FoS-plating: on Thursday
 - DT-plating: all DTs delivered (one needs re-coppering after re-welding)
 - DT-study: progress, magnet finished -> to be integrated into DT
- **Alvarez 2.0:**
 - prepare tendering of cavity series production
 - components for early procurement identified (390 k€)
 - look for Cu-plating workshops
 - prepare 3rd Quarterly
- **pulsed stripper:**
 - prepare valve tests at consultant
 - prepare "EX-Schutz" document
 - ordering of cabinet -> awaiting purchase office
- **injector controls:** exchanging of TCLs in MCR console
- **accelerator seminar on Thursday:** A. Rubin, "stable op. at $> 90^\circ$ (long.)"



ACCELERATOR SEMINAR

Anna Rubin
GSI

Thursday, 12. November 2020 at 4 pm

Ort: KBW Hörsaal & via Zoom
(ID: 961 8030 2174/ PW: 837141)

Simulations on operation of the new UNILAC post-stripper with intense proton beams: longitudinal phase advances below and beyond 90

High intensity beams may suffer from serious beam quality degradation if the focusing scheme allows for occurrence of resonances or instabilities. For transverse focusing a commonly accepted and respected lattice design rule is to choose the phase advance per structure period below the 90deg resonant stopband, which was implicitly applied to the longitudinal phase advance the same way. A recent study pointed out that for lattice structures with more than one rf gap per period the 90deg restriction needs not to be applied the same way to the longitudinal focusing as to the transverse one, thus offering more design flexibility. The present investigation is motivated by an interest to accelerate intense proton beams above longitudinal 90deg in the new post-stripper drift tube linac of the GSI UNILAC by using the rf power supplies optimized for the much stiffer heavy ions.

Coordinator: Anja Seibel, Janet Schmidt
Secretary: Larissa Hill
<https://indico.gsi.de/eventpage/contributions/339>

GSI **FAIR**