

# MM 26.01.2021

- **FoS:**
  - production of rf-coupling loop
  - preparation of plating end plates
  - prepare media connections to cavity
  - re-installation of DTs into cavity
- **Alvarez 2.0:**
  - cavity series production: all docs available
  - CERN is ready to do Cu-plating of all small parts except bellows
  - planning assuming early procurements
- **pulsed stripper:**
  - prepare valve tests at consultant through tests at GSI with N<sub>2</sub>
  - prepare H<sub>2</sub> - tests with beam in 2021
  - new version “EX-Schutz“ available, ok for technical planning
- **accelerator seminar:** Thursday: A. Krämer/GSI “Vacuum Requirements for GSI and FAIR“

## copper plating (CERN proposal):

		cavity A-I	cavity A-IIa	cavity A-IIb	cavity A-III	cavity A-IV
	# full DTs	52	40	32	28	25
	# sections	5	5	5	5	6
	due on (latest)	13.09.24	14.01.25	24.06.25	20.11.26	27.05.27
Component	Sum					
stem & DTs unit	177	52	40	32	28	25
service flange	7	2	1	2	1	1
Rf-adapter	7	2	1	2	1	1
dyn. tuner	25	5	5	5	5	5
stat. tuner	62	12	12	12	12	14
<b>bellow CF-63</b>	<b>428</b>	<b>125</b>	<b>97</b>	<b>77</b>	<b>68</b>	<b>61</b>
half-DT	10	2	2	2	2	2



**ACCELERATOR SEMINAR**

Andreas Krämer  
GSI

Thursday, 28. January 2021 at 4 pm

Online-Seminar via Zoom  
(ID: 947 1465 9455 / PW: 628703)

**Vacuum Requirements for GSI and FAIR**

The existing GSI accelerator complex consists of about 1.3km of beam vacuum system. With the FAIR accelerators, additional 4km of beam vacuum system will be built. While for the linear accelerators, the beam transfer lines and the fragment separators, where the beam only passes once, a moderate vacuum in the range of 10-8mbar or even higher is sufficient, the storage rings and synchrotron rings require pressures from 10-9mbar down to the lower 10-12mbar regime.

High radiation levels close to the targets and the cryogenic environment of the superconducting magnets are additional challenges, which have to be taken into account for the design of the vacuum systems for FAIR.

A detailed overview of the existing vacuum systems at GSI, the design for the FAIR accelerators and the challenges to reach the required vacuum level will be presented during the talk.

Coordinator: Anja Seibel, Janet Schmidt  
Secretary: Larissa Birk  
<https://indico.gsi.de/conferences/online-seminar-359>