

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 Birli

<https://indico.gsi.de/categoryDisplay.py?categId=359>

