

ACCELERATOR SEMINAR

Frank Herfurth

GSI

Thursday, 16 February 2023 at 4 pm

Seminarraum Theorie (SB3 3.170a)

Participation is also possible via Zoom: ID: 644 9909 0806 / PW: 192321

First years of operation (and experiments) at CRYRING@ESR

In 2012 the idea came up to move the low energy storage ring CRYRING, the Swedish in-kind contribution to FAIR, ahead of time from Stockholm to a location behind the experimental storage ring, ESR. The intention was to create the CRYRING@ESR facility, a unique combination of one of the world's most intense sources of heavy, highly-charged ions and a low energy storage ring with a remarkable electron cooler.

Refurbishment, modernization and installation started right after the transfer to GSI in 2013. The existing ring was transferred including a local injector and new, untested, injection system for slow beams and fast beams from the ESR, and an extraction system. Commissioning started at the local injector in 2016 while the ring was still being setup. Finally, first heavy, highly-charged ions produced at the GSI facility via UNILAC, SIS18 and ESR, got stored in the ring in the last days of 2019.

This seminar shall give some insights into operation during the last three years, as well as some of the unique challenges it met along the way. It will discuss improvements realized and planned. Those are the development of the local ion source, the transfer and injection from the ESR, operation modes, machine properties and limits, in ring beam instrumentation, extracted beam and examples of experiments.



Coordinator: Claude Krantz, Janet Schmidt

Secretary: Larissa Birli

<https://indico.gsi.de/event/15974/>

