# **ACCELERATOR SEMINAR**

## Holger Höltermann

**BEVATECH GmbH** 

## Thursday, 1. June 2023 at 4 pm

## Seminarraum Theorie (SB3 3.170a)

Participation is also possible via Zoom: ID: 618 0584 4809/ PW: 709804

#### cw buncher cavity for the KoBRA3 experiment at RAON

In order to satisfy the beam requirement of the KoBRA experiment at RAON (0.5 nsec in 1s), rebunching after the SCL 2 accelerator is required in the energy range up to 15 A MeV and for particles with an A/q range from 1 to 7. In cooperation with IBS and Hanmac Corporation, BEVATECH proposed a 5-gap IH-buncher cavity which has excellent bunching properties from 5 to 15 MeV/u. Main challenges in this project are the wide energy range and CW operation at RF power levels up to 20 kW. The cavity will offer an effective voltage amplitude of up to 1 MV. To provide the required cooling channels and cooling efficiency, the stems and drift tubes of this cavity are 3D printed. This talk will discuss the technical design approach and give a status on the development of the buncher cavity and turnkey system delivered by BEVATECH.



Coordinator: Claude Krantz, Janet Schmidt Secretary: Heidi Martinez <u>https://indico.gsi.de/event/16965/</u>

