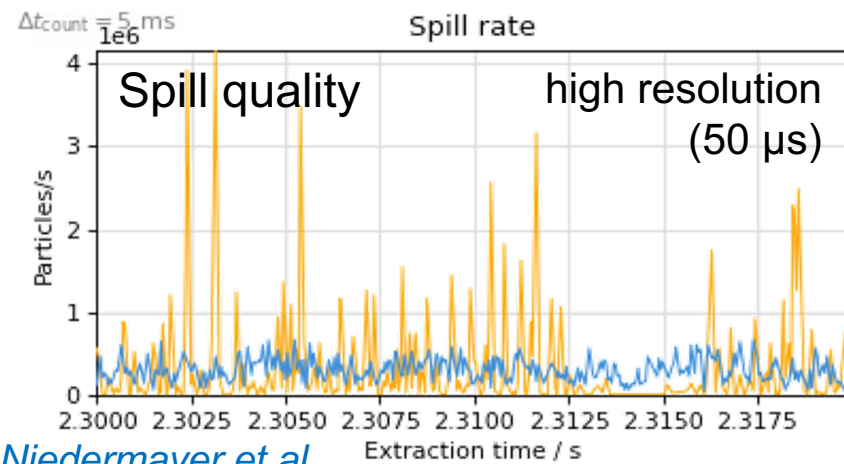
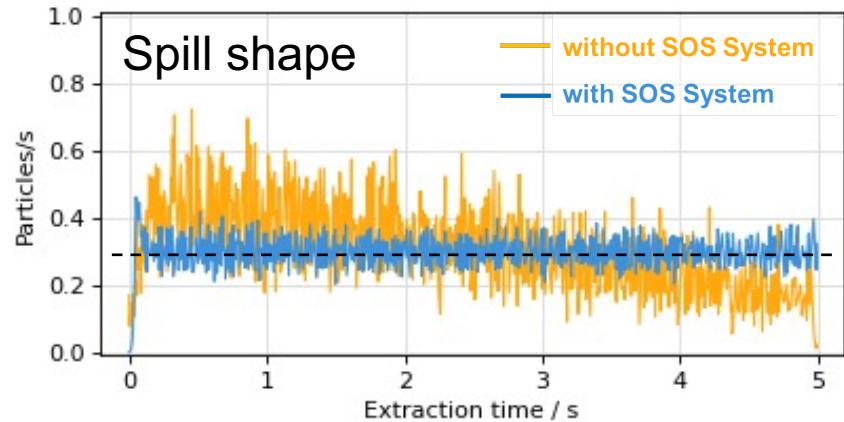


# Program Matter and the Universe

## LK II – Ion Facilities

### Major improvement of Ion Beam Quality

#### Digital Spill Optimization System (SOS)



Ph. Niedermayer et al

### Beam time 2024

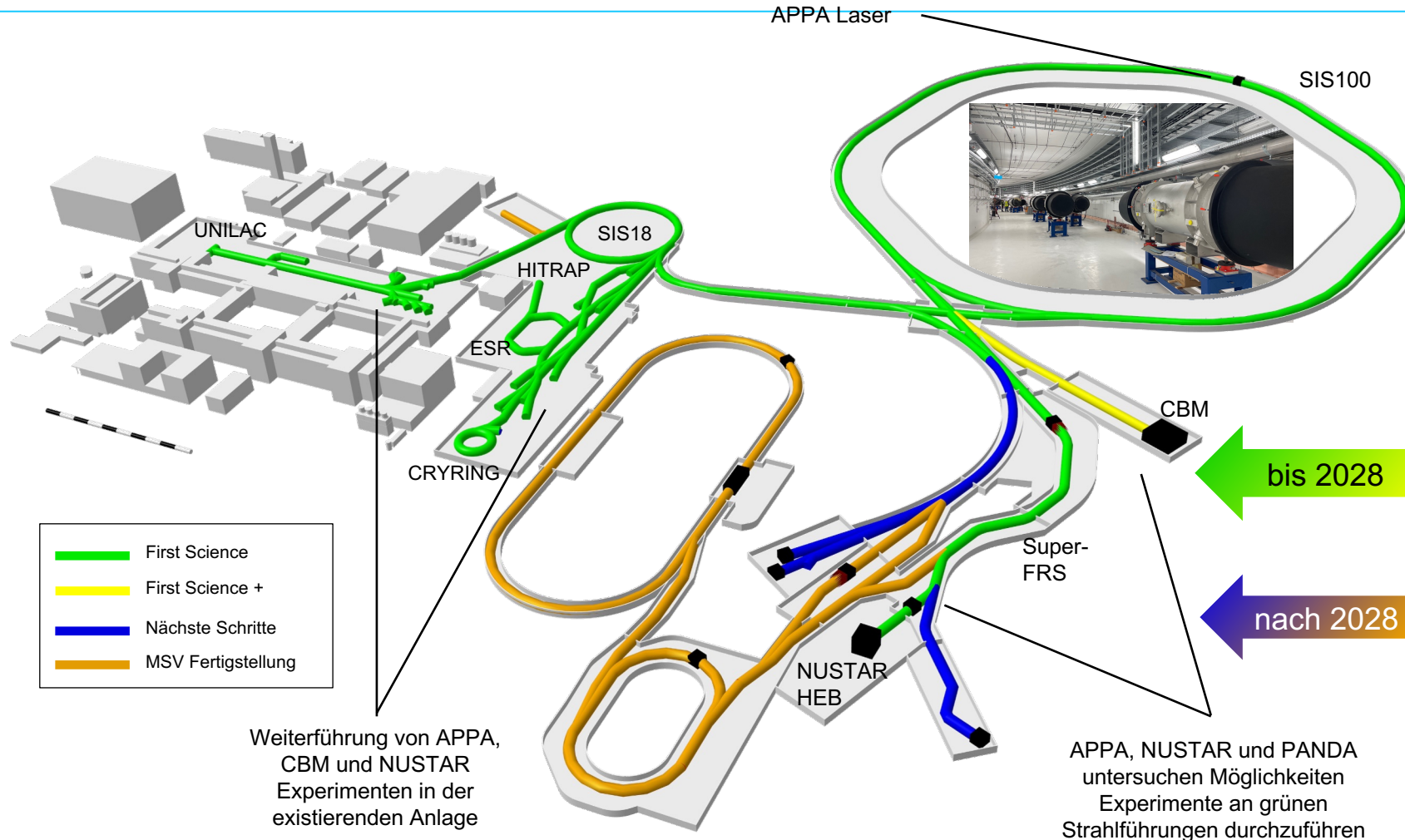


### Senate recommendation:

GSI accelerator facilities UNILAC, SIS18 and FRS, operate regularly for user experiments since 2019

- Main focus of GSI's activities is on the construction of the FAIR facilities
- user beam time at GSI is limited to 100 days per year only.
- **no beam time in 2023** because of cost increase for electricity and materials
- partial compensation in 2024: 130 days of beam time will be offered
- extensive upgrade program of GSI accelerators for FAIR led to improved intensities and beam qualities

# Program Matter and Universe Realisation of FAIR



- Start of installations in Q1/2 2024
- Continue operation within FAIR Phase-0 until 2025
- Annual beam time for science will increase progressively until 2028, then full operation
- experiments at Super-FRS will start already in 2027 using SIS18 beams (Early Science)
- in 2028 SIS100 beam will be available in the Super-FRS
- and in the CBM Cave in case of sufficient funding