

# ESR Machine Experiments 2021



- **Bunched beam laser cooling**, dedicated  $C^{3+}$  beam time scheduled, mainly laser and optical diagnostic aspects, preparation of SIS100 laser cooling, bunched beam Schottky diagnostics **rate A**
- **Injection improvement via FRS**, urgently needed for experiments with secondary beams, in cooperation with FRS team **rate A**
- **Tune response to non-linearities**, aiming at improving ion optical model, advanced method in recommissioning **rate A**
- **Study of IBS effects (above and below transition)**, aiming at fundamental issues and code development **rate A-**
- **Diffusion studies**, beam stability and beam profile under external excitation of the beam **rate B**

**participants: mainly ESR experts + students, some support by BI**