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## Status of the SIS100 HV injection-/extraction

*Thursday, 11 May 2023 16:30 (2 hours)*

The “Facility for Antiproton and Ion Research” (FAIR) is a new international accelerator complex, which is currently built in Darmstadt, Germany. Part of this complex is the SIS100 heavy ion synchrotron with a circumference of ~1086 m. To inject ions into the SIS100, an injection kicker system will be required. For fast extraction of the particle beam from the SIS100, an extraction kicker is used. This extraction kicker will be capable of performing normal extraction or emergency extraction kicks depending on the requirements. To ensure the correct kick angle at any time, the emergency kicker is charged up to 80kV synchronously with the beam energy. Depending on the experiments and the kicker type, pulse durations can vary from 0.5 up to 7 us. Slow extraction of the ion beam will include an electrostatic septum, operating with voltages up to 180 kV. The actual design, progress in building and test results of these projects will be presented.

### Funding Agency

### Footnotes

### I have read and accept the Privacy Policy Statement

Yes

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