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## Test and final design of the Cryogenic Current Comparator for slow extraction

The Cryogenic Current Comparator (CCC) is a superconducting device for measurement of low intensity beams with magnetic fields in the range of fT. It uses a Superconducting Quantum Interference Device (SQUID) as an ultrasensitive magnetometer and an elaborated superconducting shield for its protection from external magnetic fields. The system is operated in a helium bath cryostat, which has to fulfil many requirements, such as being non-magnetic, pressure/temperature stable (mK), vibration dampening, UHV fit, bakeable, compact and accessible for maintenance and repair.

The nA current resolution at required bandwidth as well as stand-alone operation of the cryogenic system could recently be demonstrated, which allows for a provisional conclusion of CCC development for FAIR. In this contribution we present the final design of the FAIR-CCC, showing our latest results from measurements of slow extracted beams in the SIS18 extraction line. Our solutions for filtering of periodic disturbances will be presented as well as design considerations and new results from our cryostat.

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