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## **Cryogenic current comparators (CCC) status and next steps**

*Wednesday 11 October 2023 09:36 (13 minutes)*

Non-destructive, absolute, DC measurement of small beam currents is the domain of superconducting CCCs. In this presentation, the three present places of activity are discussed, CERN-AD, FAIR, and the basic research in the area Jena.

The latest laboratory results of smaller CCCs are presented: Single pulse resolutions below 1 nApp, a white noise current density of 1 pA/sqrt(Hz) and a bandwidth of over 1 MHz.

The plans for transferring these results to the world of the large FAIR-CCC are explained.

Finally, the possibilities and limits of alternative, non-cryogenic solutions are discussed.

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**Session Classification:** Parallel III - DTS