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Cryogenic supply for FAIR- an update

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One of the world's most ambitious research facilities is currently being built near Darmstadt in Germany. Cryogenics plays a central role in this project, as the two largest components of the facility, SIS100 and SuperFRS, use superconducting magnets. Since the last ECD in Darmstadt, a lot has happened on our campus and the cryogenic supply for FAIR is taking shape.
This presentation provides an update on the key components of the cryogenic system: The final preparations for commissioning the refrigeration plant CRYO2, the installation work on the campus wide distribution system and the final procurements for the local cryogenic supply.
Now since work on the technical infrastructure has been completed, we can move forward with commissioning the refrigeration plant. The presentation covers the various steps leading up to mechanical completion, the successful combination/coordination of the various partners involved in the construction, and the steps still required to reach the acceptance test for 14kW at 4.4K.
Since March 2023, the piping support infrastructure has been constructed and the manufacture and installation of the distribution system has begun. Together with the final procurements for the local cryogenic supply systems for Super-FRS and SIS100, the goal of cool FAIR machines available for the first beam experiments in 2028 can be achieved.

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