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## **Cryogenic commissioning of the new Current Lead Test Facility CuLTKa**

*Wednesday 9 July 2014 12:30 (15 minutes)*

The Current Lead Test facility Karlsruhe (CuLTKa) has been constructed to optimize the capabilities for current lead testing at the Karlsruhe Institute of Technology (KIT). The facility comprises five cryostat vessels including two test cryostats connected by transfer lines to the 2 kW refrigerator. Each test cryostat holds two current leads with a superconducting short circuit connector. The new facility is integrated into a setting of several experimental setups for which the 2 kW refrigerator provides helium of two different temperature levels at overcritical pressures. The maximum current of 30 kA is fed to the current leads by water cooled flexible cables. The aim of the setup is a flexible, efficient and reliable testing of current leads.

In a first step the cryogenic commissioning of the facility without current leads was performed in the beginning of 2014, followed by a commissioning with current leads installed including current tests. Towards the end of the first half of the year the test campaign of 26 current leads for the JT-60 SA tokamak will start.

The paper will give an overview of technical details of the facility and its performance during the cryogenic commissioning phase.

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