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String assembly for the first HELIAC cryomodule

Thursday 25 September 2025 14:30 (3 hours)

The Helmholtz Linear Accelerator HELIAC is a superconducting (sc) continuous wave linear accelerator for heavy ions currently under development at GSI in Darmstadt. However, single cavity tests and the majority of cleanroom activities took and still take place at the designated facilities of the Helmholtz Institute Mainz (HIM). Each of the sc cryomodules of the HELIAC houses 3 crossbar acceleration cavities, a sc rebuncher cavity and 2 sc solenoid lenses. Such a string is about 5 m long and has a mass of roughly 600 kg. Therefore for the cleanroom assembly in ISO-class 4 a heavy duty rail and girder system was used. The first cryomodule was successfully tested in Dezember 2023. We will report on the cleaning procedures and assembly steps as well as the finale integration into cryomodule at HIM.

I have read and accept the Privacy Policy Statement

Yes

Footnotes

Funding Agency

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