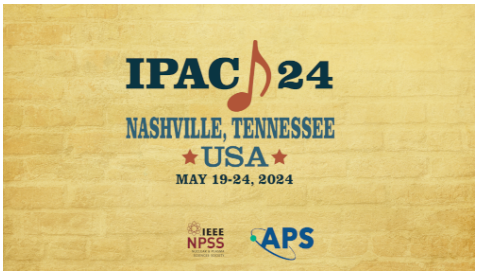

Contribution ID: **1860** Contribution code: **THPR10** Type: **Poster Presentation**

RF conditioning of an IH-DTL cavity made using additive manufacturing

Thursday, 23 May 2024 16:00 (2 hours)

Additive manufacturing ("AM") has become a powerful tool for rapid prototyping and manufacturing of complex geometries. A 433 MHz IH-DTL cavity has been constructed to act as a proof of concept for direct additive manufacturing of linac components. In this case, the internal drift tube structure has been produced from 1.4404 stainless steel, as well as pure copper using AM. We present the most recent results of vacuum, low level RF, as well as RF conditioning of the cavity.

Footnotes

Funding Agency

This research was funded by the German Federal Ministry of Education and Research (BMBF), grant number 05P21RFRB2.

Paper preparation format

LaTeX

Region represented

Europe

Primary author: Dr HÄHNEL, Hendrik (Goethe Universität Frankfurt)

Co-authors: ATES, Adem (Goethe Universität Frankfurt); DEDIC, Benjamin (Goethe Universität Frankfurt); WAGNER, Christopher (Goethe Universität Frankfurt); RATZINGER, Ulrich (Goethe Universität Frankfurt)

Presenter: Dr HÄHNEL, Hendrik (Goethe Universität Frankfurt)

Session Classification: Thursday Poster Session

Track Classification: MC4: Hadron Accelerators: MC4.A08 Linear Accelerators