Contribution ID: **13** Contribution code: **FRAN01** Type: **Contributed Oral Presentation**

First Beam Demonstration in Hand-Portable Battery-Operated Ku-band Split Linac

Friday 15 August 2025 09:30 (20 minutes)

X-ray generators, producing radiation in the MeV range, are a critical tool for radiography, non-destructive testing, and security applications. The field operation of such source requires them to be hand-portable, autonomous, and allow parameter adjustability. The dramatic level of miniaturization and cost-reduction of electron linac is achieved thanks to the implementation of such innovative technologies as air-cooled Ku-band air-traffic control magnetrons, split accelerating structure fabrication technique, and solid-state Marx modulators. In this talk, we present the design and test results of a 2 MeV Ku-band electron linac for a hand-portable X-ray generator system for field radiography, being developed by RadiaBeam.

Please consider my poster for contributed oral presentation

Yes

Would you like to submit this poster in student poster session on Sunday (August 10th)

No

Footnotes

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I have read and accept the Privacy Policy Statement

Yes

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