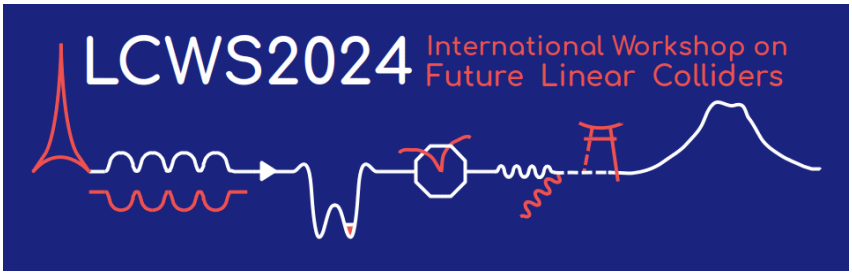

Contribution ID: **241** Type: **Oral presentation (remote)**

High-Gradient X-band Linac for Direct Electron Radiation Therapy

Wednesday 10 July 2024 16:00 (30 minutes)

We report on cold test measurements of an X-band (11.424 GHz) accelerator to provide electron beams for Very High Energy Electron therapy of cancer. The standing wave linac is designed with a 135° phase advance utilizing distributed coupling through four parallel manifolds. The accelerator is expected to reach a 100 MeV/m accelerating gradient in a one-meter structure using only 19 MW when operating around 77 K. We will present measurements from a clamped benchtop test at room temperature of the assembled linac plates prior to bonding. These fabricated prototypes will be diffusion bonded.

Apply for poster award

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