Contribution ID: **391** Contribution code: **WEP083** Type: **Poster Presentation**

Status of the experimental demonstration of GW power generation from THz-TBA

Wednesday 13 August 2025 16:00 (2 hours)

We present the current status of preparations for the experimental demonstration of GW power generation from THz-TBA. The presentation will cover the status of structure fabrication, RF power extraction and absolute power measurement, and THz drive beam preparation. Currently, 0.4 THz structures are being fabricated using two improved methods over previous fabrication techniques. RF power extraction will be achieved using an on-axis elliptical horn antenna and off-axis parabolic mirrors. The RF power will be detected with a bolometer and calibrated based on the total beam energy loss measured by a spectrometer. In recent machine studies, we successfully generated a high-charge bunch train (1 nC/bunch) compatible with 0.4 THz structure.

Please consider my poster for contributed oral presentation

No

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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