



Contribution ID: 1045 Contribution code: MOPR24

Type: **Poster Presentation**

Progress on high-power generation using sub-THz corrugated waveguide

Monday, 20 May 2024 16:00 (2 hours)

Previously we had developed a new method to fabricate corrugated waveguides (CW) operating in sub-THz frequency regime. As the next step, collaborative effort is underway to demonstrate GW-level high-power sub-THz pulse generation using a CW. We plan to fabricate a CW operating at around 400 GHz. This waveguide will be driven by a bunch train including 16 bunches with nanocoulomb-level charges per bunch. We present an overview of project's current status.

Footnotes

Funding Agency

This work is supported by Department of Energy, Office of High Energy physics, under Contract No. DE-AC02-06CH11357

Paper preparation format

LaTeX

Region represented

North America

Primary author: HA, Gwanghui (Northern Illinois University)

Co-authors: WISNIEWSKI, Eric (Illinois Institute of Technology); CHEN, Gongxiaohui (Argonne National Laboratory); KWAK, Ho Jae (Pohang Accelerator Laboratory); KONG, Hyung-sup (Pohang Accelerator Laboratory); KIM, Jina (Pohang Accelerator Laboratory); KO, Jinjoo (Korea University Sejong Campus); POWER, John (Argonne National Laboratory); KIM, Jong Hyun (Pohang Accelerator Laboratory); SEO, Min Kyu (Korea University Sejong Campus); KIM, Seung-hwan (Pohang Accelerator Laboratory); SHIN, Seunghwan (Korea University Sejong Campus); LIU, Wanming (Argonne National Laboratory)

Presenter: HA, Gwanghui (Northern Illinois University)

Session Classification: Monday Poster Session

Track Classification: MC3: Novel Particle Sources and Acceleration Techniques: MC3.A16 Advanced Concepts