Contribution ID: **2165** Contribution code: **TUPA074** Type: **Poster Presentation**

Numerical Simulations of an alternating-symmetry slab-based dielectric wakefield accelerator

Tuesday, 9 May 2023 16:30 (2 hours)

Dielectric-lined waveguides have been extensively studied to potentially support high-gradient acceleration in beam-driven dielectric wakefield acceleration (DWFA) and beam manipulations. In this paper, we investigate the beam dynamics in the alternating-symmetry slab-based dielectric wakefield accelerator proposed and discussed in Ref.[1]. We use the first principle electromagnetic "macroscopic" solver available in fine-difference time-domain particle-in-cell program WarpX.

Funding Agency

Footnotes

- W. Lynn et al. in Proc. of IPAC2021, p. 4069 (2021

I have read and accept the Privacy Policy Statement

Yes

Primary author: PHILLIPS, Cassandra (Northern Illinois University)

Presenters: PIOT, Philippe (Northern Illinois University); LYNN, Walter (University of California, Los Angeles); ANDONIAN, Gerard (University of California, Los Angeles); ROSENZWEIG, James (University of California, Los Angeles)

Session Classification: Tuesday Poster Session

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