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

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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.

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Footnotes

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

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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)

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