IPAC'24 - 15th International Particle Accelerator Conference



Contribution ID: 2293 Contribution code: SUPC080

Type: Poster Presentation

Flat beam transport for a PWFA experiment at AWA

Sunday, 19 May 2024 16:00 (2 hours)

Particle beams with asymmetric transverse emittances and profiles have been utilized in facilities for driving wakefields in dielectric waveguides and to drive plasma wakefields in plasma. The asymmetric plasma structures created by the beam produce focusing forces that are transversely asymmetric. We utilize the ellipticity of the plasma ion cavity to model the beam evolution of the flat beam driver.

Footnotes

Funding Agency

This work was performed with the support of the US Department of Energy under Contract No. DE-SC0017648 and DESC0009914.

Paper preparation format

LaTeX

Region represented

North America

Primary author: MANWANI, Pratik (University of California, Los Angeles)

Co-authors: CHOW, Derek (Particle Beam Physics Lab (PBPL)); ANDONIAN, Gerard (University of California, Los Angeles); ROSENZWEIG, James (University of California, Los Angeles); KANG, Yunbo (Particle Beam Physics Lab (PBPL))

Presenter: MANWANI, Pratik (University of California, Los Angeles)

Session Classification: Student Poster Session

Track Classification: MC3: Novel Particle Sources and Acceleration Techniques: MC3.A22 Plasma Wakefield Acceleration