NAPAC25 - North American Particle Accelerator Conference 2025



Contribution ID: 433

Type: Poster Presentation

## A hybrid structure-based wakefield accelerator

A novel structure-based wakefield accelerator is proposed. This accelerator uses the structure that simultaneously acts as a slow-wave medium stimulating Čerenkov radiation of electrons propagating the structure and suppresses the beam breakup instability. Examples of the structure are presented alongside of the calculations demonstrating the feasibility of this novel approach.

## 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

**Funding Agency** 

## I have read and accept the Privacy Policy Statement

Yes

**Authors:** ZHOLENTS, Alexander (Argonne National Laboratory); POPOVIC, Branko (Argonne National Laboratory); WALDSCHMIDT, Geoff (Argonne National Laboratory); XU, Joseph (Argonne National Laboratory); QIAN, Maofei (Argonne National Laboratory)

Presenter: POPOVIC, Branko (Argonne National Laboratory)

Session Classification: MC3

**Track Classification:** MC3 - Novel Particle Sources, Acceleration Techniques, and their Applications