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Developing expectations for AWAKE with simulations

Tuesday 3 June 2025 16:00 (2 hours)

The AWAKE experiment at CERN makes use of a self-modulated proton bunch to excite wakefields and accelerate a witness electron bunch. Run 2c of the experiment will demonstrate stabilization of the wakefield amplitude and control of the witness bunch emittance during injection and acceleration. In this work, we present an overview of the ongoing simulation efforts to support the project as it moves towards controlled acceleration and first particle-physics applications.

Footnotes

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