ID contributo: 274

Compact beamline for laser-plasma electron characterization

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PALLAS is a laser-plasma injector test facility at IJCLab developed in the framework of the preparatory phase of EuPRAXIA. It aims to achieve reliability, stability and control closer to conventional RF accelerator standards while using Laser Wakefield Acceleration (LWFA) in a plasma target with electron bunches produced by localized ionization injection.

One of the purposes is to correlate the parameters of the electron bunch to ones of the laser and plasma during its acceleration. To do so, a dedicated transport line for electron beam characterization has been designed based on start-to-end simulations. The poster will present the strategy adopted for the PALLAS electron characterization beamline to meet the project's need for simplicity, flexibility and robustness.

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