

CW Control System for the KALDERA Laser Plasma Accelerator at DESY

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KALDERA is a new laser plasma accelerator (LPA) built at DESY whose key element is a kHz repetition rate. This repetition rate will enable feedback control to achieve a higher level of stability and reliability than existing LPAs operating at a repetition rate of a few hertz. KALDERA, unlike the other DESY accelerators, is a CW machine, thus requirements for control and DAQ are different. In our presentation, we will show how we want to use the existing hardware and control system that was developed to control pulse accelerators to control new state-of-the-art LPA.

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