

## Speed Poster: Seeding experiment at FLASH

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The free-electron laser facility FLASH at DESY operates since several years in SASE mode, delivering high-intensity FEL pulses in the extreme ultraviolet and soft x-ray wavelength range for users. In order to get more control of the characteristics of the FEL pulses, external FEL seeding has proven to be a reliable method to do so. At FLASH, an experimental setup to test several different external seeding methods has been installed since 2010. After successful demonstration of direct seeding at 38 nm, the setup is now being operated in HGHG and later in EEHG mode. Furthermore, other studies on laser-induced effects on the electron beam dynamics have been performed. In this contribution, we give an overview of recent experimental results on FEL seeding at FLASH.

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