

Developments and Upgrades on the Artemis Laser Facility

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Artemis is the CLF's facility for ultrafast XUV science. Experiments on Artemis use high harmonics to investigate ultrafast electron dynamics in condensed matter and gas-phase molecules, and for coherent lensless imaging. In this talk, I shall describe some of the current developments and upgrades being undertaken on the Artemis laser facility, including multi-millijoule carrier envelope phase (CEP) stabilised few-cycle pulse generation and characterisation in the short-wave infrared (SWIR) spectral region for generating high harmonics in the water window (280-530eV), and a 100kHz ytterbium pumped OPCPA delivering up to several hundred microjoules of 30-100fs duration CEP stabilized pulses in the SWIR and MIR.