



Monday, October 29, 2018, 12:00 pm

Seaver Science Library, Room 150

SSC Auditorium next to the library

Dr. Peter Walter

Associate Staff Scientist

SLAC National Accelerator Laboratory

Menlo Park, California

The TMO Instrument: Opportunities and Plans for Time-resolved Atomic, Molecular and Optical Science at LCLS-II

The unique capabilities of Line Coherent Light Source (LCLS), the world's first hard X-ray Free-electron Laser (FEL), have significantly advanced our understanding across a broad range of science, from fundamental atomic and molecular physics, to condensed matter, to catalysis and to structural biology.

A major upgrade of the LCLS facility, the LCLS-II project, is now underway. LCLS-II is being developed as a high-repetition rate X-ray laser with two simultaneously operating, independently tunable FELs. It features a 4 GeV continuous wave superconducting linac that is capable of producing uniformly spaced (or programmable) ultrafast X-ray laser pulses at a repetition rate up to 1 MHz spanning the energy range from 0.25 to 5 keV.

This talk will present some of the important science opportunities, new capabilities and instrumentation being planned for NEH 1.1 (TMO) at LCLS-II.

Hosted by Professor Andrey Vilesov

The scientific community is invited

USC Department of Chemistry

chem.usc.edu