Contribution ID: **213** Contribution code: **MOBI4** Type: **Invited Orals**

# Laser Controlled Free-Electron Lasers

*Monday 22 August 2022 12:15 (20 minutes)*

Laser manipulation of electron beams is important for controlling free-electron lasers. In this talk, I will discuss how strong seeding can enable powerful, efficient FELs and high gradient acceleration when paired with strong tapering. I will then show how laser driven optical compression led to attosecond X-ray FEL pulses at LCLS and plans to use lasers to generate high repetition rate femtosecond and attosecond X-rays at LCLS-II.

## I have read and accept the Privacy Policy Statement

Yes

**Primary author:** DURIS, Joseph (SLAC National Accelerator Laboratory)

**Presenter:** DURIS, Joseph (SLAC National Accelerator Laboratory)

**Session Classification:** FEL Prize

**Track Classification:** Novel acceleration and FEL concepts