Stanford

Meredith A. Henstridge

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Bio

BIO

Meredith received a PhD in Applied Physics from the University of Michigan in 2018 and held a position as a postdoctoral scientist at the Max Planck Institute for the Structure of Dynamics and Matter in Hamburg, Germany from 2018-2022. Her expertise spans across the interfacing of metamaterials with nonlinear optics, spontaneous and coherent Raman scattering, nonlinear phononics, and ferroelectrics.

Meredith's current research at SLAC focuses on developing near-field-based approaches for delivering high-field mid-infrared and THz-frequency sources for experiments with LCLS-II, the development of efficient laser-driven devices for enabling high temporal-resolution experiments at the Ultrafast Electron Diffraction (MEV-UED) beamline, and efforts towards realizing an electron beam-based source that can deliver multi-cycle mid-infrared pulses at both high energies and high repetition rates for experiments with LCLS-II.

Meredith is one of the primary SLAC laser scientists supporting time-resolved experiments on the X-ray Pump-Probe (XPP) beamline, and she also supports the laser team at the Macromolecular Femtosecond Crystallography (MFX) beamline.

Meredith's google scholar page can be found here:
https://scholar.google.com/citations?user=Ab0xESYAAAAJ&hl=en

Publications

PUBLICATIONS

- **Nonlocal nonlinear phononics** *NATURE PHYSICS*
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- **Accelerating light with metasurfaces** *OPTICA*
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