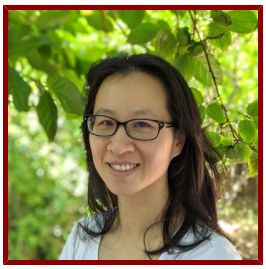
Stanford



Mengning Liang

Lead Scientist, LCLS - Linac Coherent Light Source

Bio

BIO

I am an X-ray physicist, having started my education in synchrotron radiation science with a focus on soft matter and coherent x-ray scattering techniques. Since 2009, I have worked in X-ray Free Electron Science, first at DESY in Germany and eventually to the Linac Coherent Light Source (LCLS) at SLAC National Accelerator Laboratory. My interests are in using advanced X-ray techniques to study novel materials and processes and expanding the impact of FEL science to novel areas of science to benefit society.

CURRENT ROLE AT STANFORD

My role at LCLS at SLAC is SRD Deputy Director for Strategic Development - I aid management to develop FEL science sustainably and to increase the impact of FEL science in the broader scientific community.

Coherent X-ray Imaging (CXI) Instrument lead - Lead one of the scientific instruments at LCLS. CXI is a hard X-ray, in-vacuum instrument which specialized in low signal to noise experiments due to a vacuum sample environment and high X-ray power measurements due to a nanofocus beam which can provide X-ray power up to 10^20W/cm^2

LCLS-II-HE CXI upgrade science lead. LCLS-II-HE is an upgrade of the LCLS X-ray Free Electron Laser which will take the repetition rate from 120Hz to 1MHz. The CXI instrument will undergo a complete upgrade to maximally utilize this unprecedented new source.

EDUCATION AND CERTIFICATIONS

- PhD, University of Illinois at Urbana-Champaign , Physics (2008)

LINKS

- LCLS Science Research and Development: https://lcls.slac.stanford.edu/depts
- LCLS Coherent X-ray Imaging Instrument: https://lcls.slac.stanford.edu/instruments/cxi
- LCLS-II-HE Project: https://lcls.slac.stanford.edu/lcls-ii-he