Stanford

Tom Linker

Postdoctoral Scholar, Photon Science, SLAC

Curriculum Vitae available Online

Bio

BIO

I am postdoctoral scholar in the Stanford PULSE Institute. I received my Ph.D from University of Southern California in the Collaboratory for Advanced Computing and Simulations. I have worked on development of multi-scale quantum dynamics and machine learning simulations for a variety of applications ranging from topological phases in ferroelectrics, polymer dielectric breakdown, and inelastic neutron scattering of hydrogen fuel candidates. I am currently interested in designing simulations to guide development of non-linear x-ray emission spectroscopy techniques with the ultimate goal of exploring photochemistry in biological systems. I am also developing molecular dynamics frameworks for excited state chemistry at nanoparticle surfaces for green energy technologies.

STANFORD ADVISORS

- Matthias Kling, Postdoctoral Faculty Sponsor

Research & Scholarship

CURRENT RESEARCH AND SCHOLARLY INTERESTS

I utilize multi-scale quantum dynamics and machine learning simulations to model and inform state of the art ultrafast science performed at SLAC national lab. I am currently interested in developing multi-scale simulations for development of non-linear xray optics and spectroscopy with the ultimate goal of understanding photochemistry in biological systems. I am also implementing multi-scale techniques to model excited state chemistry for green energy technologies.