



Stephen Patrick Parham

Graduate Institution: University of Colorado at Boulder

Graduate Discipline: Condensed Matter Physics

Hometown: Pasadena, CA

Relevant SC Research: Basic Energy Sciences

Research Interest:

Ultrafast electron dynamics of correlated electron systems, particularly novel materials with energy applications such as superconductors and electrochromics. I'm also interested in nanoscale devices of all kinds, including their applications and fabrication techniques.

About Me:

I am currently developing a pump-probe Angle Resolved Photoemission Spectroscopy (ARPES) system. ARPES

is a powerful tool for measuring the electronic energy levels in a solid as a function of momentum. Pump-probe ARPES expands this technique into the time domain, allowing direct measurements of excited state lifetimes and dispersions. Once complete, I will use this technique to study the excited states of novel material systems. My career goal is to be a researcher in academia or a national laboratory. In addition to being in the physics PhD program at University of Colorado at Boulder, I enjoy hiking, intramural softball, and swimming.

I received my bachelor's degree in physics from the University of California Santa Barbara (UCSB). At UCSB I did research on terahertz photonic crystals for my senior thesis. I graduated from the College of Creative Studies (CCS) Physics program with Academic High Honors and Physics High Honors. I also received the Arnold Nordsieck Award for research promise in physics. I am a member of the Golden Key National Honor Society and physics honor society Sigma Pi Sigma.



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