

Abstract Submitted  
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**Femtosecond Electron Diffraction and Shadow Imaging**<sup>1</sup> DAVID MCPHERSON, University of Texas at El Paso; National High Magnetic Field Laboratory, Florida State University — Using femtosecond electron pulses as an imaging tool, we can probe ultrafast dynamics by taking snapshots at different time delays. By using femtosecond electron diffraction (FED), we can examine structural dynamics at the atomic level in real time, and study the structure-function correlation. Additionally, femtosecond electron shadow imaging (FESI) can explore the dynamics of laser induced plasmas off the surfaces of conductors, semiconductors, and insulators.

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