

Peter V. Heuer

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Education

- **University of California, Los Angeles** **Los Angeles, CA**
Graduate *2014-present*
 - M.S. in Physics (2016).
 - Current PhD student studying high energy density plasma physics with Dr. Niemann.
 - **University of Rochester** **Rochester, NY**
Undergraduate *2010-2014*
 - B.S. in Physics (Magna Cum Laude), minor in Mathematics. G.P.A 3.85.
 - Additional concentrations in Philosophy and Anthropology.
 - Elected to Phi Beta Kappa and Sigma Pi Sigma. Awarded Highest Distinction in Physics.
 - Recipient of the full tuition Renaissance Scholarship.
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Experience

- **UCLA High Energy Density Plasma Group (Dr. Niemann)** **University of California, Los Angeles**
Graduate Researcher *2015-present*
 - Directed 1-3 week experimental campaigns combining the UCLA Large Plasma Device (LAPD) and the Phoenix Laser Lab to study collisionless shock formation.
 - Designed and built hardware for experiments, including probes, imaging diagnostics, and a target assembly.
 - Responsible for analyzing data and presenting at scientific meetings.
 - **University of Rochester Cooling and Trapping Group (Dr. Bigelow)** **University of Rochester**
Undergraduate Student *2012-2014*
 - Designed and built two frequency stabilized and linewidth narrowed external-cavity diode lasers.
 - Assembled and tested a magneto-optical trap using these custom lasers that will now be used in an undergraduate teaching laboratory.
 - **University of Rochester Physics Department** **University of Rochester**
Laboratory Assistant/TA *2011-2014*
 - Designed a new lab curriculum for an honors modern physics course (now in use).
 - Received the Undergraduate Teaching Award as an honors physics laboratory TA.
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Publications

- Heuer et al. (2016). Fast gated imaging of the collisionless interaction of a laser-produced and magnetized ambient plasma. *High Energy Density Physics*, 22, 17-20
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Presentations

- Heuer et al. (2016). Collisionless interaction of a magnetized ambient plasma and a field-parallel laser produced plasma. Talk presented at the American Physical Society, Division of Plasma Physics meeting in San Jose, CA.
 - Heuer et al. (2016). Filtered fast-gate emission imaging of the interaction of a laser-produced plasma and an ambient plasma. Poster presented at the High Energy Density Lab Astrophysics meeting at Stanford.
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Technical Skills

Languages/Programs: Python, IDL, Solidworks, Labview, Mathematica, L^AT_EX, and Igor Pro.
Laboratory: Electronics, vacuum assembly, optical alignment.
Analysis Techniques: Wavelet analysis.