



## Lea Alyse Hirsch

Postdoctoral Research Fellow, Physics

### Bio

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#### PROFESSIONAL EDUCATION

- Doctor of Philosophy, University of California Berkeley (2018)
- Bachelor of Arts, Cornell University (2012)

### Teaching

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#### COURSES

##### 2019-20

- Stars and Planets in a Habitable Universe: PHYSICS 15 (Sum)

### Publications

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#### PUBLICATIONS

- **The Possible Astrometric Signature of a Planetary-mass Companion to the Nearby Young Star TW Piscis Austrini (Fomalhaut B): Constraints from Astrometry, Radial Velocities, and Direct Imaging** *ASTRONOMICAL JOURNAL*  
De Rosa, R. J., Esposito, T. M., Hirsch, L. A., Nielsen, E. L., Marley, M. S., Kalas, P., Wang, J. J., Macintosh, B.  
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- **Discovery of a White Dwarf Companion to HD 159062** *ASTROPHYSICAL JOURNAL*  
Hirsch, L. A., Ciardi, D. R., Howard, A. W., Marcy, G. W., Ruane, G., Gonzalez, E., Blunt, S., Crepp, J. R., Fulton, B. J., Isaacson, H., Kosiarek, M., Mawet, D., Sinukoff, et al  
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- **Deep Exploration of epsilon Eridani with Keck Ms-band Vortex Coronagraphy and Radial Velocities: Mass and Orbital Parameters of the Giant Exoplanet** *ASTRONOMICAL JOURNAL*  
Mawet, D., Hirsch, L., Lee, E. J., Ruffio, J., Bottom, M., Fulton, B. J., Absil, O., Beichman, C., Bowler, B., Bran, M., Choquet, E., Ciardi, D., Christiaens, et al  
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- **Speckle Imaging Characterization of Radial Velocity Exoplanet Systems** *ASTRONOMICAL JOURNAL*  
Dalba, P. A., Kane, S. R., Howell, S. B., Horch, E. P., Li, Z., Hirsch, L. A., Burt, J., Brandt, T. D., Mocz, T., Henry, G. W., Everett, M. E., Rosenthal, L. J., Howard, et al  
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- **Two Planets Straddling the Habitable Zone of the Nearby K Dwarf Gl 414A** *ASTRONOMICAL JOURNAL*  
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2021; 161 (2)
- **Physical Parameters of the Multiplanet Systems HD 106315 and GJ 9827\*** *ASTRONOMICAL JOURNAL*

- Kosiarek, M. R., Berardo, D. A., Crossfield, I. M., Laguna, C., Piaulet, C., Akana Murphy, J. M., Howell, S. B., Henry, G. W., Isaacson, H., Fulton, B., Weiss, L. M., Petigura, E. A., Behmard, et al  
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- **Transmission Spectroscopy for the Warm Sub-Neptune HD 3167c: Evidence for Molecular Absorption and a Possible High-metallicity Atmosphere** *ASTRONOMICAL JOURNAL*  
Mikal-Evans, T., Crossfield, I. M., Benneke, B., Kreidberg, L., Moses, J., Morley, C., Thorngren, D., Molliere, P., Hardegree-Ullman, K. K., Brewer, J., Christiansen, J. L., Ciardi, D. R., Dragomir, et al  
2021; 161 (1)
  - **A Closer Look at Exoplanet Occurrence Rates: Considering the Multiplicity of Stars without Detected Planets** *ASTRONOMICAL JOURNAL*  
Savel, A. B., Dressing, C. D., Hirsch, L. A., Ciardi, D. R., Fleming, J. C., Giacomone, S. A., Mayo, A. W., Christiansen, J. L.  
2020; 160 (6)
  - **The TESS-Keck Survey. III. A Stellar Obliquity Measurement of TOI-1726 c** *ASTRONOMICAL JOURNAL*  
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  - **The TESS-Keck Survey. I. A Warm Sub-Saturn-mass Planet and a Caution about Stray Light in TESS Cameras** *ASTRONOMICAL JOURNAL*  
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  - **Updated Parameters and a New Transmission Spectrum of HD 97658b** *ASTRONOMICAL JOURNAL*  
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  - **The Discovery of the Long-Period, Eccentric Planet Kepler-88 d and System Characterization with Radial Velocities and Photodynamical Analysis** *ASTRONOMICAL JOURNAL*  
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  - **orbitize!: A Comprehensive Orbit-fitting Software Package for the High-contrast Imaging Community** *ASTRONOMICAL JOURNAL*  
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  - **Radial Velocity Discovery of an Eccentric Jovian World Orbiting at 18 au** *ASTRONOMICAL JOURNAL*  
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  - **KELT-23Ab: A Hot Jupiter Transiting a Near-solar Twin Close to the TESS and JWST Continuous Viewing Zones** *ASTRONOMICAL JOURNAL*  
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  - **The Gemini Planet Imager Exoplanet Survey: Giant Planet and Brown Dwarf Demographics from 10 to 100 au** *ASTRONOMICAL JOURNAL*  
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  - **Detection of Planetary and Stellar Companions to Neighboring Stars via a Combination of Radial Velocity and Direct Imaging Techniques** *ASTRONOMICAL JOURNAL*  
Kane, S. R., Dalba, P. A., Li, Z., Horch, E. P., Hirsch, L. A., Horner, J., Wittenmyer, R. A., Howell, S. B., Everett, M. E., Butler, R., Tinney, C. G., Carter, B. D., Wright, et al  
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  - **Long-period Giant Companions to Three Compact, Multiplanet Systems** *ASTRONOMICAL JOURNAL*  
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● **Observations of Binary Stars with the Differential Speckle Survey Instrument. VIII. Measures of Metal-poor and Triple Stars from 2015 to 2018** *ASTRONOMICAL JOURNAL*

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● **197 CANDIDATES AND 104 VALIDATED PLANETS IN K2's FIRST FIVE FIELDS** *ASTROPHYSICAL JOURNAL SUPPLEMENT SERIES*

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