

## David K. Lai

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### Education

- Ph.D. in Astronomy & Astrophysics, UC Santa Cruz, Santa Cruz, CA (2008)
- M.S. in Astronomy & Astrophysics, UC Santa Cruz, Santa Cruz, CA (2004)
- B.A. in Physics, Reed College, Portland OR (2001)

### Fellowships and Awards

- National Science Foundation, Astronomy and Astrophysics Postdoctoral Fellow, 2008 - present
- ARCS Foundation Scholar (Achievement Rewards for College Scientists), 2005-2006
- Commendation for Excellence for Academic Performance, Reed College 1998-2001
- Presidential Scholarship, Reed College, 1997-2001

### Teaching Experience and Outreach

- Instructor, UC Santa Cruz, for ASTR 002: ‘Overview of the Universe’, Summer Session I, June 26 - July 28, 2006.
- Teaching Assistant, UC Santa Cruz, for “Electromagnetism and Plasma Physics”, a graduate level Independent Study Class taught by Prof. Claire Max for the Astronomy Department, Spring Quarter 2005.
- Assistant instructor for COSMOS at UC Santa Cruz (California State Summer School for Mathematics & Science), a residential summer program for high school students, summer of 2003 and 2004.
- Teaching Assistant, UC Santa Cruz, for AY80A, “The Space Age Solar System”, Winter Quarter 2002.
- Lab Assistant for introductory physics course at Reed College, 2000-2001.

### Refereed Publications

- David K. Lai, C. M. Rockosi, M. Bolte, J. A. Johnson, T. C. Beers, Y. S. Lee, C. Allende Prieto, & B. Yanny (2009), “A Unique Star in the Outer Halo of the Milky Way”, *ApJ*, 697L, 63

- David K. Lai, M. Bolte, J. A. Johnson, S. Lucatello, A. Heger, & S. Woosley (2008), "Detailed Abundances for 28 Metal-poor Stars: Stellar Relics in the Milky Way", *ApJ*, 681, 1524
- David K. Lai, J. A. Johnson, M. Bolte & S. Lucatello (2007), "Carbon and Strontium Abundances of Metal-Poor Stars ", *ApJ*, 667, 1185
- David K. Lai, M. Bolte, J. A. Johnson, & S. Lucatello (2004), "Abundances of Extremely Metal-poor Star Candidates", *AJ*, 128, 2402
- P. Dufour, G. Fontaine, J. Liebert, K. Williams, & David K. Lai (2008), "SDSS J142625.71+575218.3: The First Pulsating White Dwarf with a Large Detectable Magnetic Field", *ApJ*, 683L, 167
- Allende Prieto, C., et al. (2007), "The SEGUE Stellar Parameter Pipeline. III. Comparison with High-Resolution Spectroscopy of SDSS/SEGUE Field Stars", *AJ*, 136, 2070

### Conferences, Proceedings and Reports

- David K. Lai, C. M. Rockosi, J. A. Johnson, M. Bolte, & SEGUE Collaboration (2009), "The Abundances of Metal-poor Stars in the Outer Halo of the Milky Way", *American Astronomical Society Meeting 219*, #407.14
- David K. Lai, S. Lucatello, M. Bolte, D. A. Fischer, & J. A. Johnson (2008), "A Search for Binary Stars at Low Metallicity", *First Stars III*, AIP Conference Proceedings, Vol. 990
- D. A. Perley, David K. Lai, C. Rockosi, & J. S. Bloom (2008), "GRB 080503: optical afterglow candidate and LRIS spectroscopy of the short burst.", *GCN*, 7666, 1P
- David K. Lai, M. Bolte, J. A. Johnson, & S. Lucatello (2006), "Abundances of Extremely Metal-Poor Stars, a New HIRES Sample", *American Astronomical Society Meeting 209*, #93.02
- T. Sivarani, et al. (2006), "High-Resolution Calibration of the SDSS/SEGUE Spectroscopic Analysis Pipeline", *American Astronomical Society Meeting 209*, #168.10
- T. Sivarani, et al. (2005), "Calibration of the SDSS/SEGUE Spectroscopic Pipeline", *American Astronomical Society Meeting 207*, #131.13
- David K. Lai, M. Bolte, J. A. Johnson, & S. Lucatello (2004), "Abundances of Extremely Metal-poor Star Candidates", *American Astronomical Society Meeting 205*, #52.10
- Greg S. Novak, David K. Lai, & D.N.C. Lin (2003), "The interesting Dynamics of the 55 Cancri System", *Scientific Frontiers in Research on Extrasolar Planets*, ASP Conference Series, Vol 294

### Professional Service

- Referee for *ApJL* (2009)
- Referee for *PASP* (2009)

### References

- Prof. Michael Bolte  
Director, University of California Observatories  
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- Prof. Jennifer A. Johnson  
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