Jonathan Langton

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Department of Physics
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Current position

Assistant Professor, Department of Physics, Principia College

Areas of specialization

Exoplanets; atmospheric physics; computational physics

Professional experience

2008–2009 Postdoctoral Fellow, UCO/Lick Observatory
2006–2008 Research Assistant, University of California, Santa Cruz
2002–2006 Teaching Assistant, University of California, Santa Cruz

Education

2008 PhD in Physics, University of California, Santa Cruz
2003 MS in Physics, University of California, Santa Cruz
2001 BS in Physics, Chemistry, & Mathematics, Principia College

Selected publications & presentations

Journal articles

2009 Laughlin, G., et al. (2009), "Rapid heating of the atmosphere of an extrasolar planet", *Nature* 457, 562-564.
2008 Langton, J. & Laughlin, G. (2008), "Circumpolar vortices on the extrasolar giant planet HD 37605 b", *Astronomy & Astrophysics*, 483, L25.
2008 Langton, J. & Laughlin, G. (2008), "Hydrodynamic Simulations of Unevenly Irradiated Jovian Planets", *Astrophysical Journal*, 674, 1106.
2007 Langton, J. & Laughlin, G. (2007), "Observational Consequences of Hydrodynamical Flows on Hot Jupiters", *Astrophysical Journal*, 657, L113.

Presentations

2011 "New photometry for the extremely eccentric giant HD 80606 b", Extreme Solar Systems II, Sept. 14, 2011.

2008 "Extreme weather on hot jupiters", Principia College, June 3, 2008

2008 "Atmospheric flows on the giant exoplanet HD 189733 b", San Francisco State University, May 12, 2008

2007 "Atmospheric dynamics on unevenly irradiated jovian planets", Harvard-Smithsonian Center for Astrophysics, Nov. 19, 2007

2007 "Hydrodynamical simulations of unevenly irradiated jovian planets", 210th AAS Meeting, May 30, 2007

2007 "The Big Swing: the periastron passage of HD 80606 b", Planetary Formation Workshop, University of California, Santa Cruz, March 29, 2007

2006 "Atmospheric flows on hot jupiters", FLASH Seminar, University of California, Santa Cruz, Oct. 13, 2006.

Teaching

I regularly teach the following courses at Principia College:

PHYS 121:	Life in the Universe
PHYS 201:	Physics for Scientists and Engineers I
PHYS 202:	Physics for Scientists and Engineers II
PHYS 283:	Advanced Lab
PHYS 301:	Classical Mechanics
PHYS 303:	Electricity and Magnetism I
PHYS 304:	Electricity and Magnetism II
PHYS 307:	Statistical Mechanics
PHYS 352:	Computational Physics

Service to the profession

2015 Co-host: Spring 2015 ISAAPT Meeting

Last updated: May 5, 2015