

Curriculum Vitae - Thayne Currie

Harvard-Smithsonian Center for Astrophysics
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1 Education

January, 2008- Ph.D. Astronomy, University of California-Los Angeles
completed at the Harvard-Smithsonian Center for Astrophysics, advisers: Scott Kenyon, Ben Zuckerman

2004 - M.S. Astronomy, University of California-Los Angeles, adviser: Brad Hansen

2002 - B.S. Physics (minor Philosophy, Mathematics), Wichita State University, magna cum laude, with Honors

2 Positions

2008-present Postdoctoral Fellow, Harvard-Smithsonian Center for Astrophysics

2005- 2007 SAO Predoctoral Fellow, Harvard-Smithsonian Center for Astrophysics (adviser: Scott Kenyon)

2005 Graduate Teaching/Grading Assistant, University of California-Los Angeles, Astronomy (Astro 278: *Infrared Astronomy*, graduate level course)

2002-2005 Graduate Student Researcher, University of California-Los Angeles, Astronomy (advisers: Brad Hansen, Ben Zuckerman)

2004-2005 Adjunct Professor of Astronomy, Glendale Community College

2002-2003, 2005 Graduate Teaching Assistant, University of California-Los Angeles, Astronomy (Astro 3: *Intro to Astronomy*, Astro 6: *Cosmology*)

2001 Summer Research Associate, Northwestern University (adviser: Ron Taam)

2000 Summer Research Associate, Cornell University (adviser: Terry Herter)

3 Fellowships/Awards

2005- SAO Predoctoral Fellowship

2001-2002 - Barry Goldwater Scholarship

4 Research Interests

Circumstellar Disk Evolution: Debris Disk Evolution, transitional T Tauri disk evolution, gas and dust coevolution in disks; Planet Formation: Terrestrial Planet Formation, Gas/Ice Giant Planet Formation, Planet-Disk Interactions; Accretion Disk Evolution; Astrobiology

5 Professional Memberships/Service

2007-present Referee for *Astronomy and Astrophysics*

2004-present Member, American Astronomical Society

6 Publications

6.1 first author

13. "The Stellar Population of η and χ Persei",

Currie, T., Irwin, J., Hernandez, J., et al., 2008, ApJ, in prep.

12. Title TBA, **Currie, T.**, Lada, C. J., Plavchan, P., et al., 2008, ApJ in prep.

11. "The X-ray Environment During the Epoch of Terrestrial Planet Formation: Chandra Observations of η Persei",

Currie, T., Evans, N., et al., 2008, AJ submitted

10. "A Spitzer Study of Debris Disks in the Young Nearby Cluster NGC 2232: Icy Planets around 1.5–3 M_{\odot} stars are Common",

Currie, T., Plavchan, P., Kenyon, S., 2008, ApJ, arXiv:0807.2056

9. "The Evolutionary State of Anemic Circumstellar Disks in IC 348 and the Primordial to Debris Disk Transition", **Currie, T.**, Kenyon, S. J., 2008, AJ submitted

8. "Observational Constraints on Circumstellar Disk Evolution and Terrestrial Planet Formation,

Currie, T., PhD thesis, University of California-Los Angeles, 2008

7. "The Rise and Fall of Debris Disks: MIPS Observations of η and χ Persei and the Evolution of Mid-IR Emission from Planet Formation",

Currie, T., Kenyon, S., Balog, Z., Rieke, G., Bragg, A., Bromley, B., 2008, ApJ, 672, 558

6. "Discovery of Gas Accretion onto Stars in 13 Myr old η and χ Persei",

Currie, T., Kenyon, S., Balog, Z., Bragg, A., and Tokarz, S., 2007, ApJ, 669L, 33

5. "The Evolution of Protoplanetary Disks Around Millisecond Pulsars: The PSR 1257+12

System”,
Currie, T., Hansen, B., 2007, ApJ, 666, 1232

4. ”*Terrestrial Zone Debris Disk Candidates in h and χ Persei*”,
Currie, T., Kenyon, S., Rieke, G., Bromley, B., and Balog, Z., 2007, ApJ, 663L, 105

3. ”*Spitzer/IRAC and JHK_s Observations of h and χ Persei: Constraints on Massive Cluster and Protoplanetary Disk Evolution at 10^7 yr*”,
Currie, T., Balog, Z., Kenyon, S., Rieke, G., et al., 2007, ApJ, 659, 599

2. ”*Hybrid Mechanisms for Gas/Ice Giant Planet Formation*”,
Currie, T., 2005, ApJ, 625, 549

1. ”*Radiative Transfer Modeling of Passive Circumstellar Disks: Application to HR 4796A*”,
Currie, T., Semenov, D., Henning, Th., Furlan, E., and Herter, T., 2003, Scientific Frontiers in Research on Extrasolar Planets, ASP Conference Series, Vol 294, Edited by Drake Deming and Sara Seager, pp. 265-268

6.2 contributing author

4. ”*The Pulsar Planets: A Test Case of Terrestrial Planet Assembly*”, Hansen, B., Shih, H-Y., **Currie, T.**, 2008, ApJ submitted

3. ”*Lyman Break Galaxies at $Z = 1.8-2.8$: GALEX/NUV Imaging of the Subaru Deep Field*”, Ly, C., Malkan, M., Treu, T., Woo, J-H, **Currie, T.**, Hayashi, M., Kashikawa, N., Motohara, K. Shimasaku, K., and Yoshida, M., 2008, ApJ submitted

2. ”*The Gemini/TEXES Survey for H_2 in Disks*”, Bitner, M., Richter, M., Lacy, J., ..., **Currie, T.**, et al., 2008, ApJ accepted, arXiv:0808.1099

1. ”*Hubble Space Telescope Observations of the White Dwarf Cooling Sequence of M_4* ”, Hansen, B., Richer, H., **Currie, T.**, et al., 2004, ApJS, 155, 551

7 Selected Presentations

4. (invited talk) ”*Spitzer Constraints on Circumstellar Disk Evolution and Terrestrial Planet Formation*”, Jet Propulsion Laboratory, May 12, 2008

3. (thesis talk) ”*Observational Constraints on Circumstellar Disk Evolution and Terrestrial Planet Formation*”, American Astronomical Society Meeting, Austin, TX, January 10, 2008

2. (talk) ”*IRAC Observations of h & χ Persei: Constraints on Protoplanetary Disk Evolution at 10-15 Myr*”, SAO Predoctoral Symposium, Harvard-Smithsonian Center for Astrophysics, March 3, 2007

8 Observing Experience/Approved Observing Programs

Optical Spectroscopy: 1.5m telescope at Whipple Observatory (FAST instrument; 6 nights)

Near-Infrared Photometry: 6.5m MMT telescope (SWIRC; 2 nights), 1.8m Perkins telescope/Lowell Observatory (Mimir; 8 nights)

Spitzer Space Telescope/IRAC (Cycle 4; 8.4 hrs.), Spitzer/MIPS (Cycle 4; 13.0 hrs.)

Near-Infrared Echelle Spectroscopy: 3m NASA IRTF telescope (CSHELL; 4 nights)

9 References

Scott J. Kenyon – Senior Scientist, Harvard-Smithsonian Center for Astrophysics

George H. Rieke – Professor of Astronomy/Dept. Directory of Steward Observatory, University of Arizona

Benjamin Zuckerman – Professor of Astronomy, University of California-Los Angeles

Brad M. S. Hansen – Associate Professor of Astronomy, University of California-Los Angeles