

HENRY B. THROOP

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Birth: November 5, 1972 Hobart, Tasmania, Australia • Citizenship: USA / Australia (dual)

EDUCATION

- Ph.D. **University of Colorado**, Astrophysical and Planetary Sciences May 2000
Thesis: *Light Scattering and Evolution of Circumstellar Disks and Planetary Rings*
Advisors: L. W. Esposito, J. Bally
- M.S., **University of Colorado, Boulder**, Astrophysical and Planetary Sciences May 1997
- B.A., **Grinnell College**, Grinnell, Iowa, Physics May 1994
Budapest Technical University, Hungary, Spring 1993

PROFESSIONAL EXPERIENCE

- **Southwest Research Institute, Boulder, CO** June 2001–present
Research Scientist
- **University of Arizona, Tucson** December 2000 – June 2001
Visiting Scholar
- **Laboratory for Atmospheric and Space Physics, University of Colorado** May–December 2000
Research Associate
- **Department of Astrophysical & Planetary Sciences, University of Colorado** Summer 2000
Lecturer
- **Laboratory for Atmospheric and Space Physics, University of Colorado** 1995–2000
Research Assistant
- **Space Science Institute, Boulder, CO** Spring 1998
Science Writer
- **Fiske Planetarium, University of Colorado** 1996–1997
Teaching Assistant, Scientific Consultant
- **Dept. Astrophysical, Planetary, & Atmospheric Sciences, University of Colorado** Fall 1994
Teaching Assistant
- **Jet Propulsion Laboratory, Pasadena, CA** Summer 1994
Research Assistant
- **Dept. Physics & Astronomy, Northern Arizona University, Flagstaff, AZ** Summer 1993
Research Assistant
- **Grant Gale Observatory, Grinnell College, Grinnell, IA** 1993–1994
Research Assistant

PUBLICATIONS

- **Throop, H. B.**, and J. Bally 2005. *Can photoevaporation trigger planetesimal formation?* *ApJ* **623**, L149–0152.
- U. A. Dyudina, P. D. Sackett, D. D. R. Bayliss, A. D. Del Genio, C. C. Porco, **H. B. Throop**, H. C. Dones, and S. Seager 2005. *Phase Light Curves for Extrasolar Jupiter and Saturn.* *ApJ* **618**, 973–986.
- C. C. Porco, **H. B. Throop**, M. J. Pantazoupoulou, and T. J. J. Kehoe 2005. *Light Scattering in Saturn's Rings, I: Basic Formulation, Ring Thickness, and the A Ring Azimuthal Asymmetry.* To be submitted to *Icarus*.
- Burns, J. A., D. P. Simonelli, M. R. Showalter, D. P. Hamilton, C. C. Porco, L. W. Esposito, and **H. B. Throop** 2004. *Jupiter's Ring-Moon System.* In **Jupiter**, Cambridge Univ. Press, 241–262.
- Brooks, S. M., L. W. Esposito, M. R. Showalter, and **H. B. Throop** 2004. *The Size Distribution of*

Jupiter's Main Ring from Galileo Imaging and Spectroscopy. Icarus, **170** 35–57.

• **Throop, H. B.**, C. C. Porco, R. A. West, J. A. Burns, M. R. Showalter, and P. D. Nicholson 2003. *The Jovian Rings: New Results Derived from Cassini, Galileo, Voyager, and Earth-based Observations. Icarus* **172**, 59–77.

• C. C. Porco and 27 co-authors 2003. *Cassini Imaging of Jupiter's Atmosphere, Satellites, and Rings. Science* **299**, 1541-1547.

• Shuping, R. Y., J. Bally, M. Morris, and **H. B. Throop** 2002. *Evidence for Grain Growth in the Protostellar Disks of Orion. ApJ* **587**, L109–L112

• DeGioia-Eastwood, K., **H. B. Throop**, G. Walker, and K. M. Cudworth 2001. *The star formation history of Trumpler 14 and Trumpler 16. ApJ* **549**, 578–589.

• **Throop, H. B.**, J. Bally, L. W. Esposito, and M. J. McCaughrean 2000. *Evidence for dust grain growth in young circumstellar disks. Science* **292**, 1686–1689.

• **Throop, H. B.** and L. W. Esposito 1998. *Photometry and Evolution of Saturn's G Ring. Icarus* **131**, 152–166.

INVITED TALKS

- 'Physics of Dusty Planetary Rings' meeting, Berne, Switzerland, 2005.
- 'Formation and Detection of Planetary Systems' meeting, Aspen, CO, 2005.
- Center for Star Formation Studies, NASA Ames Research Center, 2001.
- Southwest Research Institute, Boulder, CO, 2001.
- Steward Observatory, University of Arizona, Tucson, AZ, 2000.

CONFERENCE PROCEEDINGS & PRESENTATIONS

Approximately 40 talks at AAS, DPS, AGU, Astrobiology, and Gordon conferences.

FUNDING HISTORY

- Photo-evaporation and the Formation of Planetesimals
NASA Origins of Solar Systems 2005
\$199K total / 3 years
- Capability Development for Modeling Young Solar System Evolution
SWRI Internal R&D Program 2004
\$115K
- Photometry and Evolution of the Jovian Ring System
NASA Jupiter System Data Analysis Program 1999
\$120K total / 2 years
Throop scientific PI; Esposito institutional PI

OBSERVING PROGRAMS

- Are There Large Dust Grains in Orion's Circumstellar Disks? 2001
HST GO 9125, 10 orbits
\$70K
- The Structure and Kinematics of Irradiated Disks and Associated
High-Velocity Features in Orion (Co-I) 1999
HST GO 8324, 11 orbits
\$70K