

Jason W. Barnes' Curriculum Vitae

Home Address

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Work Address

University of Idaho
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Position and Affiliation

Assistant Professor of Physics
University of Idaho
Department of Physics

Degrees

2004 May Ph.D., Planetary Science, University of Arizona

1998 June B.S., Astronomy, California Institute of Technology

Research Experience

2008 August – present	Assistant Professor of Physics University of Idaho Planetary Science
2007 January – 2008 July	NASA Postdoctoral Program Fellow Dr. William J. Borucki <i>Characterizing Transiting Planets with Kepler</i>
2004 May – 2006 December	Postdoctoral Research Associate Dr. Robert H. Brown <i>Cassini VIMS studies of Titan's Surface</i>
1999 September – Ph.D.	Graduate Research Associate Dr. Robert H. Brown, advisor Theoretical and Observational Studies of Extrasolar Planets
1998 September – 1998 December	Graduate Research Assistant Dr. William B. Hubbard, advisor Modelling of Giant Planet Interiors
1995 – 1998 Summers	Caltech Summer Undergraduate Research Fellow Dr. Victoria S. Meadows, advisor Analysis of Near-IR Spectral Mapping of Venus and SL-9/Jupiter

Professional societies

AAS/DPS – American Astronomical Society, Division of Planetary Science

AAS – American Astronomical Society

AAAS – American Association for the Advancement of Science

AGU – American Geophysical Union

APS – American Physical Society

APS/NW – APS Northwest Region

Teaching Experience

- 2009 Spring Taught freshman-level calculus-based mechanics
2008 Fall Taught senior-undergrad/graduate level astrophysics
2006 Fall Led planetary science field trip to K/T boundary layer in Colorado
2005 Fall Designed and helped lead planetary science field trip to Baja California
2003 Spring Teaching Assistant, PtyS206: “The Golden Age of Planetary Exploration”, Dr. Michael Drake
2002 Spring Organized planetary science field trip to Washington State
PtyS594a: “Graduate Planetary Field Practicum”
25 Graduate Students, 3 Postdocs, 5 Professors, Budget of \$13,500.
2002 Fall Teaching Assistant, NATS102: “The Universe and Humanity”, Dr. Caitlin Griffith
2002 Spring Teaching Assistant, NATS102, Dr. John Lewis
2001 Fall Teaching Assistant, NATS102, Dr. Timothy Swindle
Rewrote undergraduate lab, “Solar Energy”
1999 Spring Teaching Assistant, NATS102, Dr. Robert Brown
1998 Spring Undergraduate Teaching Assistant, Ay1, Dr. Roger Blandford

Miscellaneous

Winner of 2003 Kuiper Memorial Award for excellence in academic work and research from the University of Arizona Lunar and Planetary Laboratory.

Hosted and organized *Cassini* Titan Surface Workshop at The SETI Institute in Mountain View, CA, 2008 February 4-5.

Served as ad-hoc scientific manuscript reviewer for Astrophysical Journal editors Dr. Steven Shore, Dr. Paula Szkody, Dr. James Liebert, and Dr. Steven Kawaler; Astronomy and Astrophysics editor Dr. Claude Bertout; Icarus editor Dr. Louise Prockter; Geophysical Research Letters editors Dr. Margaret Chen, Dr. Nikolai Ostegaard, and Dr. Fabio Florindo; ; Nature editor Dr. Leslie Sage; and Nature Geoscience editor Dr. Alicia Newton.

External reviewer for NASA grant panels Origins of Solar Systems, Cassini Data Analysis Program, Jupiter Data Analysis Program, and Outer Planets Research Program.

Served on scientific grant review panel for NASA Cassini Data Analysis Program and NSF Astronomy/Astrophysics CAREER program.

Managing Guest Editor for Titan, Saturn, and Saturn’s Magnetosphere special issue of Planetary and Space Science, 2008 August - present.

Participated in JPL Team-X Planetary Science Summer School, 2003 June.

Publications

Barnes, Jason W.; Curtis S. Cooper; Adam P. Showman; William B. Hubbard, “*Detecting the Wind-Driven Shapes of Extrasolar Giant Planets from Transit Photometry*”, The Astrophysical Journal, submitted.

Laurence A. Soderblom; Robert H. Brown; Jason M. Soderblom; **Jason W. Barnes**; Raldolph L. Kirk; Ralh Jaumann; David J. Mackinnon; Daniel W. Mackowski; Kevin H. Baines; Bonnie J. Buratti; Roger N. Clark; Philip D. Nicholson; Christophe Sotin, “*The Geology of Hotei Regio, Titan: Correlation of Cassini VIMS and RADAR*”, Icarus, in revision.

Soderblom, Laurence A.; **Barnes, Jason W.**; Brown, Robert H.; Clark, Roger N.; Janssen, Michael A.; Mccord, Thomas B.; Niemann, Husso B.; Tomasko, Martin G., “*Book Chapter 7: Titan’s Surface Composition*”, in book Titan From Cassini, in press (peer reviewed).

Stephan, Katrin; Jaumann, Ralf; Karkoschka, Erich; **Barnes, Jason W.**; Turtle, Elizabeth, P.; LeCorre, Lucille; Langhans, Mirjam; LeMouélic, Stéphane; Tomasko, Martin G.; Lorenz, Ralph D.; Perry, Jason, “*Book Appendix: Mapping Products of Titan’s Surface*”, in book *Titan From Cassini*, in press (not peer reviewed).

Barnes, Jason W.; Soderblom, Jason M.; Brown, Robert H.; Buratti, Bonnie J.; Sotin, Christophe; Baines, Kevin H.; Clark, Roger N.; Jaumann, Ralf; McCord, Thomas B.; Nelson, Robert; Le Mouélic, Stéphane; Rodriguez, Sebastien; Griffith, Caitlin; Penteado, Paulo; Tosi, Federico; Pitman, Karly M.; Soderblom, Laurence; Hayne, Paul; Vixie, Graham; Bibring, Jean-Pierre; Bellucci, Giancarlo; Capaccioni, Fabrizio; Cerroni, Priscilla; Coradini, Angioletta; Cruikshank, Dale P.; Drossart, Pierra; Formisano, Vittorio; Langevin, Yves; Matson, Dennis L.; Nicholson, Phillip D.; Sicardy, Bruno, “*VIMS Spectral Mapping Observations of Titan During the Cassini Prime Mission*”, Planetary and Space Science, in press.

Ádámkóvics, Mate; de Pater, Imke; Hartung, Matthew; **Barnes, Jason W.**, “*Evidence for Condensed-Phase Methane Enhancement over Xanadu on Titan*”, Planetary and Space Science, submitted.

Rodriguez, Sébastien; Le Mouélic, Stéphane; Rannou, Pascal; Tobie, Gabriel; Baines, Kevin H.; **Barnes, Jason W.**; Griffith, Caitlin A.; Hirtzig, Mathieu; Pitman, Karly M.; Sotin, Christophe; Brown, Robert H.; Buratti, Bonnie J.; Clark, Roger N.; Nicholson, Phil D., “*Global Circulation As the Main Source of Cloud Activity on Titan*”, Nature, Volume 459, pp678-682, doi:10.1038/nature08014 ,2009 June 4.

Le Corre, Lucille; Le Mouélic, Stéphane; Sotin, Christophe; **Barnes, Jason W.**; Brown, Robert H.; Buratti, Bonnie J.; Jaumann, Ralf; Rodriguez, Sebastien; Clark, Roger; Baines, Kevin H.; Nicholson, Phillip D., “*Analysis of a Cryolava Flow on Titan with VIMS Infrared Images*”, Planetary and Space Science, doi:10.1016/j.pss.2009.03.005 Planetary and Space Science, Volume 57, pp870-879, 2009 June.

Barnes, Jason W.; Brown, Robert H.; Soderblom, Jason; Soderblom, Laurence; Jaumann, Ralf; Jackson, Brian; LeMouélic, Stéphane; Sotin, Christophe; Buratti, Bonnie J.; Pitman, Karly M.; Baines, Kevin M.; Clark, Roger; Nicholson, Phillip D.; Turtle, Elizabeth, P.; Perry, Jason, “*Shoreline Features of Titan’s Ontario Lacus from Cassini/VIMS*”, Icarus, doi:10.1016/j.icarus.2008.12.028 Icarus, Volume 201, pp217-225, 2009 May.

Jaumann, Ralf; Brown, Robert H.; Stephan, Katrin; **Barnes, Jason W.**; Soderblom, Larry A.; Sotin, Christophe; Le Mouélic, Stéphane; Clark, Roger N.; Soderblom, Jason; Buratti, Bonnie J.; Wagner, Roland; McCord, Thomas B.; Rodriguez, Sebastien; Baines, Kevin H.; Cruikshank, Dale P.; Nicholson, Phil D.; Griffith, Caitlin A.; Langhans, Mirjam; and Lorenz, Ralph D., “*Fluvial Erosion and Post-erosional Processes on Titan*”, Icarus, Volume 197, pp 526-538, doi:10.1016/j.icarus.2008.06.002, 2008 October.

Brown, Robert H.; Soderblom, Laurence A.; Soderblom, Jason M.; Clark, Roger N.; Jaumann, Ralf; Barnes, Jason W.; Sotin, Christophe; Buratti, Bonnie J.; Baines, Kevin H.; Nicholson, Phillip D., “*The Identification of Liquid Ethane in Titan’s Ontario Lacus*”, Nature Volume 454, pp 607-610, 2008 July.

Barnes, Jason W.; Brown, Robert H.; Soderblom, Laurence; Sotin, Christophe; LeMouélic, Stéphane; Rodriguez, Sebastien; Jaumann, Ralf; Beyer, Ross A.; Buratti, Bonnie J.; Pitman, Karly; Baines, Kevin H.; Clark, Roger; Nicholson, Phil, “*Spectroscopy, Morphometry, and Photoclinometry of Titan’s Dunefields from Cassini/VIMS*”, Icarus, Volume 195 pp400-414, doi:10.1016/j.icarus.2007.12.006, 2008 May.

- Le Mouélic, S.; Paillou, P.; Janssen, M; **Barnes, Jason W.**; Rodriguez, S.; Sotin, C.; Brown, R. H.; Baines, K.; Buratti, B. J.; Clark, R.; Crapeau, M; Encrenaz, P.; Jaumann, R.; Geudtner, D.; Paganelli, F.; Soderblom, L.; Tobie, G.; Wall, S., “*Joint Analysis of Cassini VIMS and RADAR data: Application to the mapping of Sinlap crater on Titan*”, Journal of Geophysical Research — Planets, Volume 113, doi:10.1029/2007JE002965, 2008 April.
- McCord, Thomas B.; Hayne, Paul; Combe, Jean-Philippe; Hansen, Gary B; **Barnes, Jason W.**; Rodriguez, Sebastien; Le Mouélic, Stephane; Baines, Kevin H.; Brown, Robert H.; Buratti, Bonnie, J.; Sotin, Christophe; Nicholson, Phil; Jaumann, Ralf; Nelson, Robert; Cassini VIMS team, “*Titan’s Surface: Search for Spectral Diversity and Composition Using the Cassini VIMS Investigation*”, Icarus, Volume 194, doi:10.1016/j.icarus.2007.08.039, pp 212-242, 2008 January.
- Barnes, Jason W.**; Radebaugh, Jani; Brown, Robert H.; Wall, Steve; Soderblom, Laurence; Lunine, Jonathan; Burr, Devon; Sotin, Christophe; Le Mouélic, Stephane; Rodriguez, Sebastien; Buratti, Bonnie J.; Clark, Roger; Baines, Kevin H.; Jaumann, Ralf; Nicholson, Phillip D.; Kirk, Randolph L.; Lopes, Rosaly; Lorenz, Ralph D.; Mitchell, Karl; Wood, Charles A.; and the Cassini RADAR Team, “*Near-Infrared Spectral Mapping of Titan’s Mountains and Channels*”, Journal of Geophysical Research — Planets, Volume 112, doi:10.1029/2007JE002932, 2007 November.
- Soderblom, Laurence A.; Kirk, Randolph L.; Lunine, Jonathan I.; Anderson, Jeffrey A.; Baines, Kevin H.; **Barnes, Jason W.**; et al., “*Correlations between Cassini VIMS Spectra and RADAR SAR Images: Implications for Titan’s Surface Composition and the Character of the Huygens Probe Landing Site*”, Planetary and Space Science, Volume 55, pp 2025-2036 — 2007 November.
- Barnes, Jason W.**, “*Effects of Orbital Eccentricity on Extrasolar Planet Transit Lightcurves*”, Proceedings of the Astronomical Society of the Pacific, Volume 119, pp 986-993, 2007 September.
- Fortney, Jonathan J.; Marley, M. S.; **Barnes, Jason W.**, “*Planetary Radii Across Five Orders of Magnitude in Mass and Stellar Insolation: Application to Transits*”, The Astrophysical Journal, Volume 659, Issue 2, pp 1661-1672 — 2007 April 20.
- Barnes, Jason W.**; Brown, Robert H.; Soderblom, Laurence; Buratti, Bonnie J.; Sotin, Christophe; Rodriguez, Sebastien; Le Mouélic, Stephane; Baines, Kevin H.; Clark, Roger; Nicholson, Phil, “*Global-scale surface spectral variations on Titan seen from Cassini/VIMS*”, Icarus, Volume 186, Issue 1, pp 242-258 — 2007 January.
- Barnes, Jason W.**; Brown, Robert H.; Radebaugh, Jani; Buratti, Bonnie J.; Sotin, Christophe; Le Mouélic, Stephane; Rodriguez, Sebastien; Turtle, Elizabeth P.; Perry, Jason; Clark, Roger; Baines, Kevin H.; Nicholson, Phillip D. “*Cassini observations of flow-like features in western Tui Regio, Titan*”, Geophysical Research Letters, Volume 33, Issue 16, CiteID L16204 — 2006 August 30.
- Brown, Robert H.; Clark, Roger N.; Buratti, Bonnie J.; Cruikshank, Dale P.; **Barnes, Jason W.**; Mastrapa, Rachel M. E.; Bauer, J.; Newman, S.; Momary, T.; Baines, K. H.; Bellucci, G.; Capaccioni, F.; Cerroni, P.; Combes, M.; Coradini, A.; Drossart, P.; Formisano, V.; Jaumann, R.; Langevin, Y.; Matson, D. L.; McCord, T. B.; Nelson, R. M.; Nicholson, P. D.; Sicardy, B.; Sotin, C. “*Composition and Physical Properties of Enceladus’ Surface*”, Science, Volume 311, Issue 5766, pp. 1425-1428 — 2006 March 10.

- Griffith, C. A.; Penteado, P.; Baines, K.; Drossart, P.; **Barnes, J.**; Bellucci, G.; Bibring, J.; Brown, R.; Buratti, B.; Capaccioni, F.; Cerroni, P.; Clark, R.; Combes, M.; Coradini, A.; Cruikshank, D.; Formisano, V.; Jaumann, R.; Langevin, Y.; Matson, D.; McCord, T.; Mennella, V.; Nelson, R.; Nicholson, P.; Sicardy, B.; Sotin, C.; Soderblom, L. A.; and Kursinski, R. “*The Evolution of Titan’s Mid-Latitude Clouds*”, Science, Volume 310, Issue 5747, pp. 474-477 — 2005 October 21.
- Barnes, Jason W.**; Brown, Robert H.; Turtle, Elizabeth P.; McEwen, Alfred S.; Lorenz, Ralph D.; Janssen, Michael; Schaller, Emily L.; Brown, Michael E.; Buratti, Bonnie J.; Sotin, Christophe; Griffith, Caitlin; Clark, Roger; Perry, Jason; Fussner, Stephanie; Barbara, John; West, Richard; Elachi, Charles; Bouchez, Antonin H.; Roe, Henry G.; Baines, Kevin H.; Bellucci, Giancarlo; Bibring, Jean-Pierre; Capaccioni, Fabrizio; Cerroni, Priscilla; Combes, Michel; Coradini, Angioletta; Cruikshank, Dale P.; Drossart, Pierre; Formisano, Vittorio; Jaumann, Ralf; Langevin, Yves; Matson, Dennis L.; McCord, Thomas B.; Nicholson, Phillip D.; and Sicardy, Bruno. “*A 5-Micron-Bright Spot on Titan: Evidence for Surface Diversity*”, Science, Volume 310, Issue 5745, pp. 92-95 — 2005 October 7.
- Barnes, Jason W.** and Fortney, Jonathan J. “*Transit Detectability of Ring Systems Around Extrasolar Giant Planets*”, The Astrophysical Journal Volume 616 pp. 1193-1203 — 2004 December 1.
- Barnes, Jason W.** and Fortney, Jonathan J. “*Measuring the Oblateness and Rotation of Transiting Extrasolar Giant Planets*”, The Astrophysical Journal Volume 588 pp. 545-556 — 2003 May 1.
- Barnes, Jason W.** and O’Brien, D. P. “*Stability of Satellites around Close-in Extrasolar Giant Planets*”, The Astrophysical Journal Volume 575 pp. 1087-1093 — 2002 August 20.
- Meadows, Victoria; Crisp, David; **Barnes, Jason**; Orton, Glenn; Spencer, John. “*AAT Observations of the SL9 Fragment C, D, G, K, N, R, V, and W Impacts with Jupiter: Lightcurves and Imaging*”, Icarus, Volume 152, Issue 2, pp. 366-383 2001 August.
- Trilling, D. E.; Koerner, D. W.; **Barnes, J. W.**; Ftaclos, C.; Brown, R. H. “*Near-Infrared Coronagraphic Imaging of the Circumstellar Disk around TW Hydrae*”, The Astrophysical Journal, Volume 552, Issue 2, pp. L151-L154 2001 May 10.

Scientific Presentations

- Washington State University, Department of Physics and Astronomy, Pullman, WA: “Titan: Saturn’s Earthly-Looking Moon”, 2009 March 31.
- University of Idaho Space Grant Fellows Dinner, Moscow, ID: “Launch of NASA’s *Kepler* Spacecraft”, 2009 April 8.
- University of Washington, Department of Astronomy, Seattle, WA: “Titan – An Oasis in the Outer Solar System”, 2009 April 16.
- American Physical Society Northwest Section Annual Meeting, Vancouver, WA: “Finding and Characterizing Extrasolar Planets with *Kepler*”, 2009 May 16.
- California Institute of Technology (Caltech), Department of Geological and Planetary Sciences, Pasadena, CA: “Composition and Geomorphology of Titan’s Surface from Cassini VIMS”, 2009 June 2.
- Kepler* Science Team Meeting, Cape Canaveral, Florida: “Transit Lightcurves for Planets Orbiting Fast-Rotating Stars”, 2009 March 3.
- Cassini* Titan Surface Workshop, JHU Applied Physics Laboratory, Columbia, Maryland: “*Cassini*/VIMS Titan Observations during the Prime Mission”, 2009 March 12.
- Cassini* VIMS Science Team Meeting, SETI Institute, Mountain View, CA: “Titan’s Fog and Haze”, 2009 April 6.
- VIMS Titan Observations during the Primary Mission, internal VIMS team meeting Tucson, AZ 2008 October 27.
- Evidence for Past Lake-Level Change in Titan’s Ontario Lacus, American Astronomical Society Division for Planetary Sciences, 2008 October, Ithaca, NY.
- The Effects of Dynamically-Driven Shapes of Extrasolar Giant Planets on Transit Lightcurves, American Astronomical Society, 2008 June, St. Louis, MO.
- Detecting Extrasolar Moons with Kepler, IAU Transiting Planets Meeting, 2008 June, Cambridge, MA.
- Imaging and Spectroscopy of Titan’s Dunes in the Near-Infrared, Planetary Dunes Workshop, 2008 April, Alamogordo, NM.
- Cassini and the Case of Titan’s Missing Ethane, job interview talk, George Mason University and University of Idaho, 2008 February/March, Fairfax, VA and Moscow, ID.
- Geomorphology of Ontario Lacus from VIMS/T38, internal Cassini Titan Surface Workshop, 2008 February, Mountain View, CA.
- Detectability and Lightcurves of Transiting Planets on Eccentric Orbits, American Astronomical Society, 2008 January, Austin, TX.
- Photoclinometry, Morphometry, and Spectroscopy of Titan’s Sand Dunes from Cassini/VIMS, American Geophysical Union, 2008 December, San Francisco, CA.
- Titan’s Sand Dunes: Window to a New World; Invited colloquium at the SETI Institute, 2007 November, Mountain View, CA.

- Titan's Sand Dunes: Window to a New World; Invited colloquium at the Planetary Science Institute, 2007 October, Tucson, AZ.
- Titan's Sand Seas; Invited seminar at Center for Integrative Planetary Science, University of California Berkeley, 2007 October, Berkeley, CA.
- Cassini/VIMS Near-Infrared Imaging and Spectroscopy of Titan's Sand Dunes; Contributed talk to the American Astronomical Society Division of Planetary Sciences Meeting, 2007 October, Orlando, FL.
- Titan as an Icy Moon; Contributed talk for the Workshop on Ices, Oceans, and Fire: Satellites of the Outer Solar System, 2007 August, Boulder, CO.
- Near-IR Imaging and Spectroscopy of Titan's Sand Dunes and Geologic History of Sinlap Crater, internal Cassini Titan Workshop, 2007 July, Flagstaff, AZ.
- Titan's Surface in the Near-IR, Invited review for CIPS Titan workshop II: Titan after Cassini, 2007 May, Berkeley, CA.
- Near-Infrared Spectral Mapping of Titan's Mountains and Channels, Contributed talk for the Lunar and Planetary Science Conference, 2007 March, Houston, TX.
- Near-Infrared Spectral Mapping of Titan's Mountains and Channels, Contributed talk to the Cassini Titan Surface Workshop, 2007 February, Noordwijk, Netherlands.
- Studies of Titan's 5-Micron-Bright Regions Using Combined VIMS and ISS Observations, Contributed talk for the American Geophysical Union Meeting 2006 December, San Francisco, CA.
- Global Spectral Diversity of Titan's Surface, Contributed talk for the American Astronomical Society Division of Planetary Sciences Meeting 2006 October, Pasadena, CA. (1 of 2 on this topic)
- Global Maps of Titan from VIMS, Presentation at Cassini Titan Surface Workshop, 2006 April, Boulder, CO.
- A VIMS Tour-de-Titan, Invited presentation for the Lunar and Planetary Laboratory, 2006 March, Tucson, AZ.
- Titan's Enigmatic 5-Micron-Bright Terrain, Contributed talk for the Lunar and Planetary Science Conference 2006 March, Houston, TX. (1 of 2 on this topic)
- Preliminary Results from VIMS Spectral Unit Classification, Presentation at Cassini Titan Surface Workshop, 2005 November Tucson, AZ.
- The Brightest Spot on Titan, Contributed talk for the American Astronomical Society Division of Planetary Sciences Meeting 2005, Cambridge, UK. (1 of 2 on this topic)
- Extrasolar Planets: Recent Developments and Future Expectations. Invited review for the Lunar and Planetary Laboratory Conference, May 2004, Tucson, AZ.
- Detectability of Planetary Rings around Transiting Extrasolar Giant Planets. Contributed talk for the American Astronomical Society Division of Planetary Sciences Meeting 2003, Monterey, CA. (1 of 3 on this topic)
- Galactic Open Cluster Arizona Transit Survey. Contributed poster at the Scientific Frontiers in Research on Extrasolar Planets meeting, Washington, DC, June 2002. (1 of 2 on this topic)

Measuring the Oblateness and Rotation of Transiting Extrasolar Giant Planets. Contributed Poster to the American Astronomical Society Division of Planetary Sciences Meeting 2002, Birmingham, AL. (1 of 2 on this topic)

Stability of Satellites around Close-in Extrasolar Giant Planets. Contributed talk at the American Astronomical Society Division of Planetary Sciences Meeting 2001, New Orleans, LA. (1 of 3 on this topic)

Education and Public Outreach Presentations

Author of Sky and Telescope article, “Titan: Earth’s Frozen Sibling”, 2008 December.

Scientific contributor to article in Finnish aerospace magazine Tähdet ja Avaruus on Jupiter’s interior, “Näin Kurkistetaan ka Asujättien Ytimeen”, 2007 November.

Ventura County Astronomical Society annual banquet, “Cassini Reveals Titan”, 2006 December.

Sun City West Astronomical Society, “Discovering Titan”, 2005 November.

Green Valley Community Center, “Discovering Titan”, 2005 January.

Grant Support

Source: *Cassini* Visual and Infrared Mapping Spectrometer Science Team

Title: Travel and Logistical Support for VIMS Titan Surface Science

PI: Jason W. Barnes

Award Amount: \$30,000/year

Period Covered by Award: 2008 October - 2010 September

Status: current

FTE: 0.04 / year + summer student

Source: NASA Cassini Data Analysis Program

Title: Mapping, Characterization, and Analysis of Channel/Valley Features on Titan

PI: Devon Burr (University of Tennessee, Knoxville)

Award Amount: \$10,586 over 2 years to CoI Barnes

Period Covered by Award: 2008 October - 2010 September

Status: current

FTE: 0.04 / year

Source: Idaho Space Grant Consortium Research Initiation Grant

Title: Characterizing Transiting Extrasolar Planets with NASA's *Kepler* Mission

PI: Jason W. Barnes

Award Amount: \$25,000 over 1 year

Period Covered by Award: 2009 June 1 - 2010 March 15

Status: current

FTE: - / year (funds student)

Source: NASA Outer Planets Research Program

Title: The Role of Sand in Titan's Geologic Cycle

PI: Jason W. Barnes

Award Amount: \$174,144 over 3 years

Period Covered by Award: 2009 January - 2011 December

Status: approved, waiting for funds

FTE: 0.08 / year

Source: NASA Astrobiology: Exobiology and Evolutionary Biology

Title: Orbital Stability of Habitable Moons and Moons of Habitable Planets

PI: Jason W. Barnes

Award Amount: \$175,516.07 over 3 years

Period Covered by Award: 2010 January - 2012 December

Status: approved, waiting for funds

FTE: .08 / year

Source: NASA Outer Planets Research

Title: Global Patterns of Tectonism on Titan

PI: Jason W. Barnes

Award Amount: \$333,918.68 over 3 years

Period Covered by Award: 2010 January - 2012 December

Status: pending

FTE: .08 / year

Source: NASA Jet Propulsion Laboratory

Title: Building Toward the Design of a Next-Generation Titan Imaging Spectrometer

PI: Jonathan Lunine (U. Arizona)

Co-I: Jason W. Barnes

Sub-Award Amount: \$2,675.44 for 1 year
Period Covered by Award: 2009 June 15 - 2009 August 31
Status: **pending**, submitted 2009 June 5
FTE: 0.017 / year (1 week)

Source: NSF Astronomy & Astrophysics

Title: A Long Baseline Investigation of Clouds, Haze, and Methane Distributions on Titan
PI: Eliot F. Young, SouthWest Research Institute (SwRI)
Co-PI: Jason W. Barnes
Award Amount: \$30,000 over 3 years for Co-PI Barnes
Period Covered by Award: 2010 January - 2012 December
Status: **pending**, submitted 2008 November 14
FTE: - / year

Source: NASA ROSES Supplementary Education

Title: Astronomy for Idaho (for upgrading Observatory)
PI: Jason W. Barnes
Award Amount: \$44,705 over 3 years
Period Covered by Award: 2009 October - 2012 September
Status: **pending**, submitted 2009 April 8
FTE: - / year

Source: NASA Cassini Data Analysis Program

Title: Hazes & Clouds in Titan's Atmosphere from Cassini-VIMS Data
PI: Imke de Pater (UC-Berkeley)
Co-I: Jason W. Barnes
Sub-Award Amount: \$27,186 over 3 years
Period Covered by Award: 2010 March 1 - 2013 February 28
Status: **pending**, submitted 2009 May 1
FTE: - (funds undergraduate student)

Source: NASA Cassini Data Analysis Program

Title: Searching for Trace Components in Spectra of Enceladus
PI: Rachel Mastrapa (SETI)
Co-I: Jason W. Barnes
Sub-Award Amount: \$27,186 over 3 years
Period Covered by Award: 2010 January 1 - 2012 December 31
Status: **pending**, submitted 2009 May 1
FTE: - (funds undergraduate student)

Source: NASA Cassini Data Analysis Program

Title: Titan's Methane Distribution
PI: Erika Barth (SwRI-Boulder)
Co-I: Jason W. Barnes
Sub-Award Amount: \$27,186 over 3 years
Period Covered by Award: 2009 November 1 - 2012 October 31
Status: **pending**, submitted 2009 May 1
FTE: - (funds undergraduate student)

Source: NASA Cassini Data Analysis Program

Title: Regional Geologic Mapping of Titan
PI: David Williams (Arizona State U)
Collaborator: Jason W. Barnes (no award)
Status: **pending**, submitted 2009 May 1

Source: NASA Cassini Data Analysis Program
Title: Titan's Near-IR Transmission from VIMS
PI: Paul Hayne (UCLA)
Collaborator: Jason W. Barnes (no award)
Status: **pending**, submitted 2009 May 1

Source: Idaho NASA EPSCoR Collaboration Grant
Title: Next-Generation Camera for a Future Mission to Saturn's Moon Titan
PI: Jason W. Barnes
Award Amount: \$4000 over 1 year
Period Covered by Award: 2009 October - 2010 September
Status: **pending**, submitted 2009 May 12
FTE: - / year (funds travel only)

Source: NASA Planetary Geology and Geophysics Program
Title: A Field Trip to the Namib Sand Sea, Africa
PI: Jani Radebaugh (BYU)
Collaborator: Jason W. Barnes (no award)
Status: **pending**, submitted 2009 May 15

Source: NASA Origins Program
Title: Accretion and Dynamics of Plausible Planetary Systems
PI: Jack Lissauer (NASA Ames Research Center)
Collaborator: Jason W. Barnes (no award)
Status: **pending**, submitted 2009 May 22

Completed Grants

Source: NASA Postdoctoral Program
Title: Characterization of *Kepler*'s Transiting Extrasolar Giant Planets
PI: Jason W. Barnes
Award Amount: \$65,000/year (2 years)
Period Covered by Award: 2007 January - 2008 December
Status: **ended**
Full-Time-Equivalent: 1.0 / year

Source: *Cassini* Visual and Infrared Mapping Spectrometer Science Team
Title: Travel and Logistical Support for VIMS Titan Surface Science
PI: Jason W. Barnes
Award Amount: \$12,278/year
Period Covered by Award: 2007 October - 2008 September
Status: **ended**
FTE: — / year