

Jani Radebaugh
Assistant Professor
Department of Geological Sciences, Brigham Young University
Provo, UT 84602 (801) 422-9127
janirad@byu.edu

Academic History

- 2006- Assistant Professor of Geological and Planetary Sciences, Brigham Young University
2005-06 Postdoctoral Research Associate, University of Arizona
Mountains, dunes, and other surface features on Saturn's moon Titan from Cassini RADAR
Jonathan Lunine and Ralph Lorenz, advisors
Hotspots and paterae on Jupiter's moon Io, Alfred McEwen, advisor
2008-2009, 2005-2006 Field assistant to the Antarctic Search for Meteorites
2005 Doctor of Philosophy in Planetary Science
University of Arizona
Formation and evolution of paterae on Io – Alfred McEwen, advisor
1999 Master of Science in Geology/ Planetary Geology
Brigham Young University
Distribution of calderas in the solar system – Eric Christiansen, advisor
1993 Bachelor of Science in Physics/ Astronomy
Brigham Young University

Research Support

Awarded Funding – Principal Investigator

- 9/2009-12 NASA Outer Planets Research program, \$232,594 total 3-year budget,
Dunes on Titan: Dune properties, global winds, and climate
1/2010-12 BYU Mentored Environment Grant program, \$20,000 total
Surface features of Jupiter's moon Io as an expression of subsurface processes
6/2008-11 NASA Cassini Data Analysis program, \$103,829 total 2-year budget,
Temperatures and Eruption Styles of Io's Volcanoes from Cassini Images
2/2008-10 BYU Mentored Environment Grant program, \$16,000 total,
Morphologies and evolution of dunes from Cassini Radar

Proposals Submitted

- 2011: 2 PI submissions, 1 declined (NASA NESSF Graduate Fellowship, Zac Liu acting PI), 2 non-PI submissions
2010: 1 PI submission, 1 declined (NASA PGG), 7 non-PI submissions (2 NSF), 1 selected
2009: 2 PI submissions, 1 selected (BYU MEG), 1 declined (NASA PGG), 8 non-PI submissions, 2 selected
2008: 1 PI submission, 1 declined (NASA PGG), 7 non-PI submissions, 2 selected
2007: 4 PI submissions, 3 selected (BYU MEG, NASA OPR, NASA CDAP), 1 declined (NASA OPR)
2006: 1 PI submission, 1 declined (NASA OPR), 3 non-PI submissions, 1 selected
2005: 1 PI submission, 1 declined (NASA OPR), 1 non-PI submission, 1 selected

Instrument/Spacecraft Proposals

- 2010: AVIATR - Titan Airplane, Jason Barnes PI, for consideration for Discovery, went through JPL Team X, not submitted
2009: Titan Imager Spectrometer, Bob Brown PI, for consideration for TSSM, not submitted

Student Advising

Graduate Students:

- Zac Liu – advisor – mountains on Titan from Cassini Radar – MS geology 2012
Chris Savage – advisor – dunes on Titan from Cassini Radar – MS geology 2011
Daniel Allen – acting advisor – temperatures of Io volcanoes from Cassini – MS Physics 2009
Committee member for Susan Larson 2007, Nicole Cox 2009, Maria Slack 2009, Jason Luke 2011,
Landon Burgener 2011

Undergraduate Students:

- Tanner Mills (11-) – dune parameter analysis on Titan
Rob Windell (11) – surface features of Io
Karl Arnold (10-11) – distribution of dune fields on Titan
Chris Savage (08-11) – pattern analysis of Titan dunes; awarded \$1500 ORCA Mentoring Grant 2009
Brandon Barth (08-11) – patera distributions on Io
Colton Goodrich (09-10) – Titan dune statistics
Kirk Schleiffarth (09-11) – Tectonic geomorphology of Io
Chris Spencer (07-08) – dunes on Titan and terrestrial analogues
Parker Valora (07-08) – distribution of mountains and rivers on Titan

Other Student Advising:

- Mike Malaska (09-) – rivers, karst, dune compositions on Titan. Mike is an amateur planetary scientist.

Other BYU Student mentoring activities:

- Participated in field trip to snow fields in Aspen Grove with Summer Rupper's class, 2011
Led BYU Geology/Astronomy club activity on successful(!) meteorite search, 2009
Participated in hike to hot springs with the Geology Club, 2007
Helped advise the BYU Mars Rover Team, 2008. Traveled to Hanksville, UT, to do site analyses and instrument tests, 3/08

Courses Taught

- Planetary Geology Readings Seminar (Geol 490R/590R) – Fall 2011
Geology of the Planets (Geol 109) – Winter 2007, 2008, 2009, 2010, 2011
Geomorphology (Geol 411) – Fall 2008, 2009, 2010, 2011
Solid Earth Geophysics (Geol 440) – Winter 2007, 2008, 2009, 2010, 2011
Field Camp (Geol 410) – Spring 2010, 2011
Introductory Geology (Geol 101) – Spring 2008, 2009, Fall 2010
Geology for Elementary Education (PS110B) – Fall 2009
Department Seminar (Geol 491R/591R) – Fall 2008
Guest lecturer for Introduction to Geology (Geo 101 – Spring 2007, Winter 2008, Fall 2008),
Introduction to Astronomy (Phys 127 – Winter 2008), Dinosaurs (Geo 100 – Fall 2008), Physical Geology (Geo 111 – Fall 2007), Physical Science 100 (Fall 2010)

Publications

- 43) Barnes, J.W., L. Lemke, R. Foch, C.P. McKay, R.A. Beyer, **J. Radebaugh** and 25 others 2011. AVIATR – Aerial Vehicle for In-situ and Airborne Titan Reconnaissance, A Titan airplane mission concept. *Experimental Astronomy*, DOI10.1007/s10686-011-9275-9.
- 42) Lorenz, R.D., B.K. Jackson, J.W. Barnes, J.N. Spitale, **J. Radebaugh**, and K.H. Baines 2011. Meteorological conditions at Racetrack Playa, Death Valley National Park: Implications for rock production and transport. *Journal of Applied Meteorology and Climatology* 50, 2361-2375.
- 41) Le Gall, A., A.G. Hayes, R. Ewing, M.A. Janssen, **J. Radebaugh**, C. Savage, P. Encrenaz and the Cassini RADAR Team 2011. Latitudinal and altitudinal controls of Titan's dune field morphometry. *Icarus* 217, 231-242.
- 40) Le Gall, A., M.A. Janssen, L.C. Wye, A.G. Hayes, **J. Radebaugh**, C. Savage, H. Zebker, R.D. Lorenz, J.I. Lunine, R.L. Kirk, R.M.C. Lopes, S. Wall, P. Callahan, E.R. Stofan, T. Farr and the Cassini Radar Team 2011. Cassini SAR, radiometry, scatterometry, and altimetry observations of Titan's dune fields. *Icarus* 213, 608-624.
- 39) Williams, D.A., **J. Radebaugh**, R.M.C. Lopes and E. Stofan 2011. Geomorphologic mapping of the Menrva region of Titan using Cassini RADAR data. *Icarus* 212, 744-750.
- 38) Veeder, G.J., A.G. Davies, D.A. Williams, D.L. Matson, T.V. Johnson, **J. Radebaugh** 2011. Io: Heat flow from dark paterae. *Icarus* 212, 236-261.
- 37) **Radebaugh, J.**, R.D. Lorenz, S.D. Wall, R.L. Kirk, C.A. Wood, J.I. Lunine, E.R. Stofan, R.M.C. Lopes, P. Valora, T.G. Farr, A.G. Hayes, B. Stiles, G. Mitri, H. Zebker, M. Janssen, L. Wye, A.

- Le Gall, K.L. Mitchell, F. Paganelli, R.D. West, E.L. Schaller and the Cassini Radar Team 2011. Regional geomorphology and history of Titan's Xanadu province. *Icarus* 211, 672-685.
- 36) **Radebaugh, J.**, R. Lorenz, T. Farr, P. Paillou, C. Savage, C. Spencer 2010. Linear dunes on Titan and Earth: Initial remote sensing comparisons. *Geomorphology* 121, 122-132, doi:10.1016/j.geomorph.2009.02.022.
- 35) Mitri, G., M.T. Bland, A.P. Showman, **J. Radebaugh**, B. Stiles, R.M.C. Lopes, J.I. Lunine, and R.T. Pappalardo 2010. Mountains on Titan: Modeling and Observations. *Journal of Geophysical Research* 115, E10002, doi:10.1029/2010JE003592.
- 34) Lorenz, R.D., P. Claudin, B. Andreotti, **J. Radebaugh**, and T. Tokano 2010. A 3 km atmospheric boundary layer on Titan indicated by dune spacing and Huygens data. *Icarus* 205, 719-721.
- 33) Lopes, R.M.C., E.R. Stofan, R. Peckyno, **J. Radebaugh**, K.L. Mitchell, G. Mitri, C.A. Wood, R.L. Kirk, S.D. Wall, J.I. Lunine, A. Hayes, R. Lorenz, T. Farr, L. Wye, J. Craig, R.J. Ollerenshaw, M. Janssen, A. LeGall, F. Paganelli, R. West, B. Stiles, P. Callahan, Y. Anderson, P. Valora, L. Soderblom and the Cassini RADAR Team 2010. Distribution and interplay of geologic processes on Titan from Cassini Radar data. *Icarus* 205, 540-558, doi:10.1016/j.icarus.2009.08.010.
- 32) Bourke, M.C., N. Lancaster, L.K. Fenton, E.J.R. Parteli, J.R. Zimbelman, and **J. Radebaugh** 2010. Extraterrestrial dunes: An introduction to the special issue on planetary dune systems. *Geomorphology* 121, 1-14.
- 31) Lorenz, R.D. and **J. Radebaugh**. Global pattern of Titan's dunes: Radar survey from the Cassini prime mission 2009. *Geophysical Research Letters* 36, doi:10.1029/2008GL036850.
- 30) Wall, S.D., R.M. Lopes, E.R. Stofan, C.A. Wood, **J. Radebaugh**, S.M. Horst, B.W. Stiles, R.M. Nelson, L.W. Kamp, M.A. Janssen, R.D. Lorenz, J.I. Lunine, T.G. Farr, G. Mitri, P. Paillou, F. Paganelli, and K.L. Mitchell 2009. Cassini RADAR images at Hotei Arcus and western Xanadu, Titan: Evidence for geologically recent cryovolcanic activity 2009. *Geophysical Research Letters* 36, doi:10.1029/2008GL036415.
- 29) Stiles, B.W., S. Hensley, Y. Gim, D.M. Bates, R.L. Kirk, A. Hayes, **J. Radebaugh**, R.D. Lorenz, K.L. Mitchell, P.S. Callahan, H. Zebker, W.T.K. Johnson, S.D. Wall, J.I. Lunine, C.A. Wood, M. Janssen, F. Pelletier, R.D. West, C. Veeramacheneni, and the Cassini RADAR Team 2009. Determining Titan surface topography from Cassini SAR data. *Icarus* 202, 584-598, doi:10.1016/j.icarus.2009.03.032.
- 28) Lorenz, R. D., R.M. Lopes, F. Paganelli, J.I. Lunine, R.L. Kirk, K.L. Mitchell, L.A. Soderblom, E.R. Stofan, G. Ori, M. Myers, H. Miyamoto, **J. Radebaugh**, B. Stiles, S.D. Wall, C.A. Wood and the Cassini RADAR Team 2008. Fluvial channels on Titan: Initial Cassini RADAR observations. *Planetary and Space Science* 56, 1132-1144.
- 27) **Radebaugh, J.**, R. Lorenz, J. Lunine, S. Wall, G. Boubin, E. Reffet, R. Kirk, R. Lopes, E. Stofan, L. Soderblom, M. Allison, M. Janssen, P. Paillou, P. Callahan, C. Spencer and the Cassini Radar Team 2008. Dunes on Titan Observed by Cassini Radar, *Icarus* 194, 690-703, doi:10.1016/j.icarus.2007.10.015.
- 26) Lunine, J.I., C. Elachi, S. D. Wall, M.A. Janssen, M. D. Allison, Y. Anderson, R. Boehmer, P. Callahan, P. Encrenaz, E. Flamini, G. Franceschetti, Y. Gim, G. Hamilton, S. Hensley, W. T. K. Johnson, K. Kelleher, R. L. Kirk, R. M. Lopes, R. Lorenz, D. O. Muhleman, R. Orosei, S. J. Ostro, F. Paganelli, P. Paillou, G. Picardi, F. Posa, **J. Radebaugh**, L. E. Roth, R. Seu, S. Shaffer, L. A. Soderblom, B. Stiles, E.R. Stofan, S. Vetrella, R. West, C. A. Wood, L. Wye, H. Zebker, G. Alberti, E. Karkoschka, B. Rizk, E. McFarlane, C. See, and B. Kazeminejad 2008. Titan's diverse landscapes as evidenced by Cassini Radar's third and fourth looks at Titan. *Icarus* 195, 415-433. doi:10.1016/j.icarus.2007.12.022.
- 25) Lorenz, R. D., K. L. Mitchell, R. L. Kirk, A. G. Hayes, H. A. Zebker, P. Paillou, **J. Radebaugh**, J. I. Lunine, M. A. Janssen, S. D. Wall, R. M. Lopes, B. Stiles, S. Ostro, G. Mitri, E. R. Stofan and the Cassini RADAR Team 2008. Titan's Inventory of Organic Surface Materials, *Geophysical Research Letters* 35, L02206, doi10.1029/2007GL032118.
- 24) Lopes, R., K.L. Mitchell, S.D. Wall, G. Mitri, M. Janssen, S. Ostro, R. L. Kirk, A.G. Hayes, E.R. Stofan, J.I. Lunine, R.D. Lorenz, C. Wood, **J. Radebaugh**, P. Paillou, H. Zebker, F. Paganelli and the Cassini RADAR Team 2007. The Lakes and Seas of Titan. *Eos*, vol 88, no. 51, 569-576.
- 23) Keszthelyi, L., W. Jaeger, M. Milazzo, **J. Radebaugh**, A. Davies, K. Mitchell 2007. New Estimates for Io Eruption Temperatures: Implications for the Interior. *Icarus* 192, 491-502.

- 22) Barnes, J., **J. Radebaugh**, R. H. Brown, S. Wall, L. Soderblom, J. Lunine, D. Burr, C. Sotin, S. Le Mouelic, S. Rodriguez, B. J. Buratti, R. Clark, K. H. Baines, R. Jaumann, P. D. Nicholson, R. L. Kirk, R. Lopes, R. Lorenz, K. Mitchell, and C. A. Wood 2007. Near-infrared spectral mapping of Titan's mountains and channels. *Jour. Geophys. Res.* 112, E11006, doi:10.1029/2007JE002932.
- 21) **Radebaugh, J.**, R. Lorenz, R. Kirk, J. Lunine, E. Stofan, R. Lopes, S. Wall, and the Cassini Radar Team 2007. Mountains on Titan from Cassini Radar. *Icarus* 192, 77-91, doi:10.1016/j.icarus.2007.06.020.
- 20) Soderblom, J., R. L. Kirk, J. I. Lunine, J. A. Anderson, K. H. Baines, J. W. Barnes, J. M. Barrett, R. H. Brown, B. J. Buratti, R. N. Clark, D. P. Cruikshank, C. Elachi, M. A. Janssen, R. Jaumann, E. Karkoschka, S. Le Mouelic, R. M. Lopes, R. D. Lorenz, T. B. McCord, P. D. Nicholson, **J. Radebaugh**, B. Rizk, C. Sotin, E. R. Stofan, T. L. Sucharski, M. G. Tomasko, and S. D. Wall 2007. 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* 55, 2025-2036.
- 19) Stofan, E.R., C. Elachi, J.I. Lunine, R.D. Lorenz, B. Stiles, K.L. Mitchell, S. Ostro, L. Soderblom, C. Wood, H. Zebker, S. Wall, M. Janssen, R. Kirk, R. Lopes, F. Paganelli, **J. Radebaugh**, L. Wye, Y. Anderson, M. Allison, R. Boehmer, P. Callahan, P. Encrenaz, E. Flamini, G. Francescetti, Y. Gim, G. Hamilton, S. Hensley, W.T.K. Johnson, K. Kelleher, D. Muhleman, P. Paillou, G. Picardi, F. Posa, L. Roth, R. Seu, S. Shaffer, S. Vetrella, and R. West 2007. The Lakes of Titan. *Nature* 445, 61-64.
- 18) Lopes, R.M.C., K.L. Mitchell, E.R. Stofan, J. I. Lunine, R. Lorenz, F. Paganelli, R.L. Kirk, C.A. Wood, S.D. Wall, L.E. Robshaw, A.D. Fortes, C.D. Neish, **J. Radebaugh**, E. Reffet, S. J. Ostro, C. Elachi, M. D. Allison, Y. Anderson, R. Boehmer, G. Boubin, P. Callahan, P. Encrenaz, E. Flamini, G. Francescetti, Y. Gim, G. Hamilton, S. Hensley, M. A. Janssen, W. T. K. Johnson, K. Kelleher, D. O. Muhleman, G. Ori, R. Orosei, G. Picardi, F. Posa, L. E. Roth, R. Seu, S. Shaffer, L. A. Soderblom, B. Stiles, S. Vetrella, R.D. West, L. Wye, and H. A. Zebker 2007. Cryovolcanic features on Titan's surface as revealed by the Cassini Titan Radar mapper. *Icarus* 186, 395-412.
- 17) Stofan, E.R., J.I. Lunine, R. Lopes, F. Paganelli, R.D. Lorenz, C.A. Wood, R. Kirk, S. Wall, C. Elachi, L.A. Soderblom, S. Ostro, M. Janssen, **J. Radebaugh**, L. Wye, H. Zebker, Y. Anderson, M. Allison, R. Boehmer, P. Callahan, P. Encrenaz, E. Flamini, G. Francescetti, Y. Gim, G. Hamilton, S. Hensley, W.T.K. Johnson, K. Kelleher, D. Muhleman, G. Picardi, F. Posa, L. Roth, R. Seu, S. Shaffer, B. Stiles, S. Vetrella, and R. West 2006. Mapping of Titan: Results from the First Two Titan Radar Passes, *Icarus* 185, 443-456.
- 16) Barnes, J. W., R. H. Brown, **J. Radebaugh**, B. J. Buratti, C. Sotin, S. Le Mouelic, S. Rodriguez, E. P. Turtle, J. Perry, R. Clark, K. H. Baines, and P. D. Nicholson, 2006. Cassini observations of flow-like features in western Tui Regio, Titan. *Geophysical Research Letters* 33, L16204, doi:10.1029/2006GL026843.
- 15) Lorenz, R., S. Wall, **J. Radebaugh**, G. Boubin, J. Lunine et al. 2006. The Sand Seas of Titan: Cassini RADAR Observations of Longitudinal Dunes. *Science* 312, 724-727.
- 14) Milazzo, M. P., L. P. Keszthelyi, **J. Radebaugh**, A. G. Davies, E. P. Turtle, P. Geissler, K. P. Klaasen, J. A. Rathbun, A. S. McEwen, 2005. Volcanic Activity at Tvashtar Catena, Io. *Icarus* 179, 235-251.
- 13) **Radebaugh, J.**, A. S. McEwen, M. Milazzo, L. P. Keszthelyi, A. G. Davies, E. P. Turtle, D. Dawson 2004. Observations and Temperatures of Io's Pele Patera from *Cassini* and *Galileo* Spacecraft Images. *Icarus* 169, 65-79.
- 12) Keszthelyi, L., W. L. Jaeger, E. P. Turtle, M. Milazzo, and **J. Radebaugh**, A post-*Galileo* view of Io's interior. *Icarus* 169, 271-286.
- 11) Elizabeth P. Turtle, E. P., L. P. Keszthelyi, A. S. McEwen, **J. Radebaugh**, M. Milazzo, D. Simonelli, P. Geissler, D. A. Williams, J. Perry, W. L. Jaeger, K. P. Klaasen, H. H. Breneman, T. Denk, C. B. Phillips, and the *Galileo* SSI Team 2004. The Final *Galileo* SSI Observations of Io: Orbits G28-I33. *Icarus* 169, 3-28.
- 10) Williams, D. A., P. M. Schenk, J. M. Moore, L. P. Keszthelyi, E. P. Turtle, W. L. Jaeger, **J. Radebaugh**, M. P. Milazzo, R. M. C. Lopes, and R. Greeley 2004. Mapping of the Culann-Tohil region of Io from Galileo imaging data, *Icarus* 169, 80-97.

- 9) Lopes, R. M. C., L. W. Kamp, W. D. Smythe, P. Mouginis-Mark, J. Kargel, **J. Radebaugh**, E. P. Turtle, J. Perry, D. Williams, R.W. Carlson, S. Douté 2004. Lava Lakes on Io: Observations of Io's volcanic activity from *Galileo* NIMS during the 2001 fly-bys. *Icarus* 169, 140-174.
- 8) Kargel, J. S., R. W. Carlson, A. G. Davies, B. Fegley Jr., A. Gillespie, R. Greeley, R. R. Howell, K. L. Jessup, L. Kamp, L. P. Keszthelyi, R. M. Lopes, T. J. MacIntyre, F. Marchis, A. S. McEwen, M. Milazzo, J. Perry, **J. Radebaugh**, L. Schaefer, N. Schmer, W. D. Smythe, J. R. Spencer, D. A. Williams, J. Zhang, and M. Zolotov 2003. Extreme Volcanism on Io: Latest Insights at the End of the *Galileo* Era. *Eos* 84, 313.
- 7) Jaeger, W. L., E. P. Turtle, L. P. Keszthelyi, **J. Radebaugh**, A. S. McEwen, and R. T. Pappalardo 2003. Orogenic tectonism on Io. *Journal of Geophysical Research* 108, doi:10.1029/2002JE001946.
- 6) Williams, D. A., **J. Radebaugh**, L. P. Keszthelyi, A. S. McEwen, R. Lopes, S. Doute, R. Greeley 2002. Geologic Mapping of the Chaac-Camaxtli Region of Io from *Galileo* Imaging Data. *Journal of Geophysical Research* 107, 5068.
- 5) **Radebaugh, J.**, L. Keszthelyi, A. McEwen, E. Turtle, M. Milazzo, W. Jaeger 2001. Paterae on Io: A New Type of Volcanic Caldera? *Journal of Geophysical Research* 106, 33,005-33,020.
- 4) Turtle, E. P., W. L. Jaeger, L. P. Keszthelyi, A. S. McEwen, M. Milazzo, J. Moore, C. B. Phillips, **J. Radebaugh**, D. Simonelli, F. Chuang, and P. Schuster 2001. Mountains on Io: High-resolution *Galileo* observations, initial interpretations, and formation models. *Journal of Geophysical Research* 106, 33,173-33,200.
- 3) Keszthelyi, L., A. S. McEwen, C. B. Phillips, M. Milazzo, P. Geissler, E. P. Turtle, **J. Radebaugh**, D. A. Williams, D. P. Simonelli, H. H. Breneman, K. P. Klaasen, G. Levanas, T. Denk, and the *Galileo* SSI Team 2001. Imaging of volcanic activity on Jupiter's moon Io by *Galileo* during the *Galileo* Europa Mission and the *Galileo* Millennium Mission. *Journal of Geophysical Research* 106, 33025-33052.
- 2) McEwen, A. S., M. J. S. Belton, H. H. Breneman, S. A. Fagents, P. Geissler, G. Hoppan, W. L. Jaeger, L. Keszthelyi, M. P. Milazzo, C. B. Phillips, **J. Radebaugh**, E. P. Turtle, and others, 2000, *Galileo* at Io: Results from High-Resolution Imaging. *Science* 288, 1193-98.
- 1) Jones, D. E., **J. Radebaugh**, G. R. Wilson, M. E. Burton, E. J. Smith 1997. The Nature of Saturn's Planetary Magnetic Field Based upon the Configuration of its Magnetospheric Currents and a New Spherical Harmonic Analysis: Pioneer 11. *Encyclia*, The Journal of the Utah Academy of Sciences 74, 230-254.

Commentaries

Radebaugh, J. 2009. Titan's sticky dunes? *Nature Geoscience* 2, 608-609, doi:10.1038/ngeo623.

Publications in Progress

- Radebaugh, J.** Dunes on Saturn's moon Titan at the end of the Cassini Equinox Mission. *Aeolian Research*, in revision.
- Allen, D.A., **J. Radebaugh** and D. Stephens. Temperatures of three Ionian volcanoes from Cassini images. *Icarus*, in progress.
- Radebaugh, J.**, T. Farr, E. Heggy, O. Aharonson, R. Lorenz, S. Wall, El-Din, C. Savage, S. Phillips, D. Evans, and T. El Mahdy. Structure and movement of an Egyptian desert linear dune and implications for linear dunes on Titan. In progress.
- Carling, G., A. Dangerfield, **J. Radebaugh**, T. Saito, D. Tingey, J. Keith, J. South. Eruption styles and temperatures of Kilauea from remote digital video camera and satellite data. In progress.
- Savage, C.J. and **J. Radebaugh**. Pattern Analysis of Dunes on Titan. *Icarus*, in progress.
- Radebaugh, J.**, A. Le Gall, R.D. Lorenz, R.L. Kirk, S. Wall. Potential stabilized dunes at Titan's northern latitudes: Implications for climate change. *Geophysical Research Letters*, in progress.
- Hamilton, C.W., C.D. Beggan, S.Still, M. Beuthe, R.M.C. Lopes, D.A. Williams, W. Wright, and **J. Radebaugh**. Spatial distribution of volcanoes on Io: Implications for tidal heating and magma ascent. *Geophysical Research Letters*, in revision.
- Mitchell, K. L., Stofan, E. R., **Radebaugh, J.**, Paillou, P., Hayes, A., Lunine, J. I., Lorenz, R. D., Stiles, B. W., Lopes, R. M., Wall, S. D., Ventura, B., Notarnicola, C., Casarano, D., Mitri, G., Janssen,

M., Farr, T. G., Ostro, S. J. and the Cassini RADAR Team (in review) Titan's north polar lake district: Insights from the Cassini Titan RADAR Mapper. *Icarus*, submitted.

Theses

- Radebaugh, J.** 2005. Formation and Evolution of Paterae on Jupiter's Moon Io, Doctoral Dissertation, University of Arizona, Tucson, AZ, 217 pp.
Radebaugh, J. 1999. Terrestrial Pluton and Planetary Caldera Sizes: Implications for the Origin of Calderas. M. S. Thesis, Brigham Young University, 180 pp.

University Service

- 2008-11 Department representative/organizer for College of Physical and Mathematical Sciences Student Research Conference
2010 Helped lead College of Physical and Mathematical Sciences Leadership Council field trip to Hawaii
2006-08 Member of Brigham Young University-wide task force on Learning Outcomes program implementation resulting from external accreditation recommendations
2003-04 President of the Graduate and Professional Student Council, University of Arizona, advocate for 9,000 graduate students to administration, state Regents and legislature

External Leadership/Service

- 2012 Co-organized Radar in planetary sciences session, IGC (International Geological Congress), Brisbane, Australia
2011 Co-organized planetary geology session, IAG (International Association of Geomorphologists), Addis Ababa, Ethiopia meeting
2008- Associate Team Member of the NASA Cassini Radar Science Team
2008- Steering committee member for NASA advisory panel OPAG, Outer Planets Assessment Group
2010 Organized Io Workshop, 30 participants, 2-day workshop with field trip, Sponsored by BYU and NASA Outer Planets Research Program, Provo, UT
2010 Coauthored white paper on Io Exploration (first author David A. Williams), NASA Decadal Survey
2006 Review Panel participant, NASA Planetary Geology and Geophysics Program
Peer Reviewer, Geophysical Research Letters 2011, Geological Society of America Bulletin 2011, Icarus 2011 (x2), Icarus 2010 (x2), Icarus 2009, Nature Geoscience 2009, Planetary and Space Science 2009, Journal of Volcanology and Geothermal Research 2009, Geophysical Research Letters 2009, Geophysical Research Letters 2008, Book review for Meteoritics and Planetary Science 2008, Icarus 2006, Journal of Geophysical Research 2006, Springer/Praxis Book Review 2005
External reviewer for NASA Outer Planets Research 2010, Mars Fundamental Research Program 2011
2007-11 Judge for Dwornik student paper award at the Lunar and Planetary Science Conference, Houston
2007 Organizing committee member for NASA-sponsored workshop, Ices, Oceans, and Fire: Satellites of the Outer Solar System, Boulder, CO
2009 Co-chair of Titan's Surface session, Lunar and Planetary Science Conference, Houston
2007 Co-chair of Titan's Surface session, Division of Planetary Sciences of the American Astronomical Society fall meeting

Invited Seminar/Meeting Talks

- 2012 BYU Department of Physics and Astronomy, *The surface of Titan after eight years of Cassini Observations*
2011 BYU Library Conference, *Searching for Meteorites in the footsteps of Scott and Amundsen*
2009 BYU Department of Geological Sciences, *Titan's Mobile Surface*
2009 Caltech Geological and Planetary Sciences, *Titan's Mobile Surface*
2009 Planetary Science Institute, Tucson, *Titan's Mobile Surface*

- 2009 Utah Valley University's Earth Science Department, *Encounters at the Edge of the Solar System*
 2008 University of Alberta Geophysics Group, *Encounters at the Edge of the Solar System*
 2008 American Association of Physics Teachers Annual Meeting, Edmonton, *Satellites of the Outer Solar System: Glimpses of Earth*
 2007 University of Utah Department of Geology and Geophysics, *Saturn's moon Titan from Cassini Radar*
 2007 University of Wyoming Department of Geology and Geophysics Distinguished lecturer series, *Dunes and Mountains on Titan from Cassini Radar*
 2007 Brigham Young University Department of Physics and Astronomy, *The surface of Saturn's moon Titan as illuminated by Cassini Radar*
 2005 Lunar and Planetary Laboratory Conference, Tucson, *Io at the end of the Galileo Era*

Invited Public Talks/Outreach

- 2012 National, international press related to publication of *Experimental Astronomy* Titan airplane paper, including: <http://news.byu.edu/archive12-jan-titanairplane.aspx> and front page local paper: http://www.heraldextra.com/news/local/central/provo/byu-professor-working-to-send-airplane-to-saturn-s-moon/article_7b4bf284-9dd9-5a85-acdc-53965b8548e9.html
 2012 Life, the Universe and Everything Convention, *Adventures in the Solar System*
 2012 Orem Public Library, *The Antarctic Search for Meteorites and Planetary Results*
 2012 Interviewed for BYU film segment on AVIATR, an airplane for Titan exploration
 2012 Timpanogos Gem and Mineral Club, *Searching for Meteorites in the footsteps of Shackleton, Scott and Amundsen*
 2011 Invited talk at SpaceFest III, *Encounters at the Edge of the Solar System*, a conference attended by hundreds including Apollo astronauts
 2009-11 Invited presentation, Antarctica and the solar system to 200 6th graders, Utah
 2010 Invited talk to BYU's College of Physical and Mathematical Sciences Volunteer Leadership Council, *Adventures in the Solar System*
 2010 Subject of BYU Communications student documentary
 2009 Invited public lecture for the International Year of Astronomy, *Alien Worlds of the Outer Solar System*, Brigham Young University Library
 2009 Guest Blogger, The Planetary Society, *Terrestrial field studies of planetary processes*
 2009 Filmed during field work on Australian dunes for National Geographic documentary series, *A Traveller's Guide to the Planets*
 2009 Public talk at BYU planetarium, *Encounters at the Edge of the Solar System*
 2009 Local, national press related to publication of *Geophysical Research Letters* Global Pattern of Titan's Dunes, including <http://www.sciencedaily.com/releases/2009/03/090302111328.htm>
 2008 Public talk to residents of McMurdo Station, Antarctica, *Encounters at the Edge of the Solar System*.
 2008 Honorary lecturer for the Brigham Young University Library's annual Alice Louise Reynolds Women-in-Scholarship lecture, *Encounters at the Edge of the Solar System*. \$1000 honorarium
 2008 Interviewed by the BBC4 for a radio presentation on Transient Lunar Phenomena
 2008 Invited BYU student auxiliary services talk, *Antarctica and the Planets*
 2008 Invited church youth talk, *Antarctica and the Planets*
 2008 Interviewed for short film piece for KBYU: Mountains on Titan from Cassini Radar
 2008 National, international press related to publication of *Icarus* mountains paper, including: <http://www.sciencedaily.com/releases/2007/12/071220223729.htm>
 2007 Public talk at BYU planetarium, *Cassini explores the Saturn system*
 2007 Interviewed about Nature publication on lakes on Titan, Utah press
 2006 Invited talk BYU Kennedy International Center, *Antarctic Dreams: Still Life on The Ice with Meteorites*
 2006 Interviewed for Utah Valley University radio show, *Hey, I can do that!* encouraging young women into science careers
 2006-07 Brown bag seminar, Lunar and Planetary Laboratory, University of Arizona, *Antarctic Dreams: Still Life on The Ice with Meteorites*

- 2006 Invited lunch talk to retired men's group, Tucson, *Adventures in the Solar System: Antarctica, Titan, and Io*
- 2006 Radio interview CBC (Canadian Broadcasting Corporation), *Dunes on Titan*
- 2006 Interviews with UA and BYU press, the Discovery Channel online, and PBS, *Dunes on Titan*
- 2005 Interviewed by press in AZ, UT on participation in ANSMET, the Antarctic Search for Meteorites
- 2004 Interviewed for film segment for *The Planets*, a BBC/A&E co-production for the Science Channel, *Volcanoes on Io*

Field Experience

- 2012 Co-led BYU Hamblin Global Geology student field trip to Kilauea (25 students)
- 2011 Led BYU Geomorphology class on field trip to Death Valley, CA (30 students); also in 2010, 2009, 2008
- 2011 Field studies of Erta Ale lava lake, Ethiopia
- 2010 Field studies of dunes in the eastern Sahara, GPR, OSL, and geomorphological studies on Qattameya dunes, W. Cairo, and northern Great Sand Sea.
- 2010 Co-led BYU College of Physical and Mathematical Sciences Leadership Council field trip to Hawaii (Oahu and Big Island), for volcanoes and astronomy
- 2009 Field studies of linear dunes of the Australian Simpson Desert
- 2009 Co-led BYU Hamblin Global Geology student/alumni field excursion (~30 participants) to India Himalayas tectonism and geomorphology
- 2009 Field trip to Tunisian desert as a Planetary Analogue, 27th IAS meeting
- 2009 Co-led successful student meteorite search at a Utah playa lake
- 2008 Field excursion across Vatnajokull glacier to Grimsvotn volcano, volcanism and glacial interactions, with IAVCEI conference, Iceland
- 2008-09 Field assistant to the Antarctic Search for Meteorites (ANSMET)
- 2007 Co-led BYU Hamblin Global Geology student/alumni field excursion (~30 participants) to Italy and Switzerland volcanoes and glaciers
- 2005-06 Field assistant to the Antarctic Search for Meteorites (ANSMET)
- 2005 Co-led BYU Hamblin Global Geology student/alumni field excursion (~30 participants) to Hawaii volcanoes
- 2005 Co-led University of Arizona planetary science field trip, Baja California beaches and batholiths
- 2002 Co-organized University of Arizona planetary science field trip to Washington State flood basalts and megafloods
- 2003 Field assistant to thermal studies of Io's volcanoes at Kilauea
- 2001 International Volcanology Field Course in the Central Andes, Argentina
- 2001 Planetary Volcanology (NASA PGG) Workshop Kilauea Volcano, Hawaii
- 2001 New Mexico Volcanism Workshop
- Myriad other geology field trips to locations within Utah, the western US, Hawaii, the Bahamas, Mexico, New Zealand, Australia, Scotland

Career Development

- 2007 Cutting Edge NSF Early Career Workshop, College of William and Mary, VA
- 2006 Brigham Young University Faculty Development Seminar series

Selected Collaborations

- AEOLUS Group - Studies of volatile interactions with the lunar surface including observations and instrument studies.** Includes Arlin Crotts (Columbia), Daniel Austin (BYU), Denton Ebel (Am Mus Nat Hist), Mike Joner (BYU), Peter Schultz (Brown U) among others.
- NASA Cassini Radar Associate Team Member.** Includes Jonathan Lunine (UA), Ralph Lorenz (JHUAPL), Steve Wall (JPL), Rosaly Lopes (JPL), Ellen Stofan (Proxemy R), Randy Kirk (USGS), Larry Soderblom (USGS), Michael Allison (Goddard), Mike Janssen (JPL), Howard Zebker (Stanford), Lauren Wye (Stanford), Philippe Paillou (UMR France), Tom Farr (JPL), Oded Aharonson (Caltech), Alex Hayes (Caltech), Alice LeGall (JPL), Phil Callahan (JPL),

Karl Mitchell (JPL), Chuck Wood (Wheeling Jesuit), Erwan Reffet (LESIA Paris), Jason Barnes (UI), Elizabeth Turtle (JHUAPL), Catherine Neish (JHUAPL) among others.

Io studies. Includes Alfred McEwen (UA), Elizabeth Turtle (JHUAPL), Rosaly Lopes (JPL), Ashley Davies (JPL), David Williams (ASU), Laszlo Keszthelyi (USGS), Windy Jaeger (USGS), John Spencer (SWRI), Julie Rathbun (Redlands), Franck Marchis (Berkeley), Chris Hamilton (Goddard), Karl Mitchell (JPL), Moses Milazzo (USGS) among others.

Dune field studies. Includes Tom Farr (JPL), Ralph Lorenz (JHUAPL), Jason Barnes (UI), Essam Heggy (JPL), Nick Lancaster (DRI), Charlie Bristow (U of London), Oded Aharonson (Caltech), Steve Wall (JPL), Philippe Paillou (Bordeaux) among others.

AVIATR – Aerial Vehicle for In-situ and Airborne Titan Reconnaissance. Jason Barnes (UI) PI, includes David Atkinson (UI), Ross Beyer (NASA Ames), Chris McKay (NASA Ames), Larry Lemke (NASA Ames), Rick Foch (Naval Research Labs), Devon Burr (UTenn), Ralph Lorenz (JHUAPL), Tony Colaprete (NASA Ames), Ken Edgett (MSSS), Terry Hurford (GSFC), Kim Reh (JPL) and others.

Meeting and Workshop Attendance

2012 Cassini Radar Team workshop, Pasadena, 1/12

Cassini Radar Team dunes workshop, Pasadena, 1/12

2011 Asia Ocean Geosciences Society (AOGS) Meeting, Taiwan, 8/11

Titan Dunes Workshop, Pasadena, CA, 7/11

Titan Surface Workshop, Pasadena, CA, 7/11

GSA Rocky Mountain and Cordilleran Joint Meeting, Logan, UT, 5/11

Lunar and Planetary Science Conference, Houston, 3/11

Outer Planets Assessment Group (OPAG) meeting, Alexandria, VA, 3/11

IAG Conference, Addis Ababa Ethiopia, 2/11

2010 American Geophysical Union meeting, San Francisco, 12/10

2nd International Planetary Dunes Workshop, Alamosa, CO, 5/10

Lunar and Planetary Science Conference, Houston, 3/10

2009 Dunes on Titan workshop, Desert Research Institute, Las Vegas, 11/09

Division of Planetary Sciences of the American Astronomical Society meeting, Puerto Rico 10/09

27th IAS Meeting of Sedimentologists, Alghero, Italy 9/09

7th International Conference on Geomorphology, Melbourne, 7/09

Lunar and Planetary Science Conference, Houston, 3/09

Outer Planets Assessment Group (OPAG) Meeting, Baltimore, 3/09

2008 Outer Planets Assessment Group (OPAG) meeting, Phoenix, 11/08

IAVCEI volcanology and chemistry meeting, Reykjavik, 8/08

American Association of Physics Teachers Meeting, invited speaker, Edmonton, Alberta, 7/08

Planetary Dunes Workshop, White Sands, NM, 4/08

Lunar and Planetary Science Conference, Houston, 3/08

Titan Workshop, Mountain View, CA, 2/08

Cassini Project Science Group (PSG) Titan Working Group meeting, 1/08

2007 American Geophysical Union meeting, San Francisco, 12/07

Division of Planetary Sciences of the American Astronomical Society meeting, Orlando 10/07

Lunar and Planetary Science Conference, Houston, 3/07

2006 American Geophysical Union meeting, San Francisco, 12/06

Division of Planetary Sciences of the American Astronomical Society meeting, Pasadena, 10/06

Ices, Oceans, and Fire, Satellites of the Outer Solar System LPI meeting, Boulder, CO 8/06

Io Workshop, Boulder, CO 8/06

Meeting Abstracts – 2006-present, first-author only

Radebaugh J., A. Le Gall, J. W. Barnes, R. D. Lorenz, J. I. Lunine, R. L. Kirk, Cassini Radar Team
2012, Stabilized Dunes on Titan Indicate Changes in Climate and Surface Processes. LPS XLIII
Abstract 2224.

- Radebaugh J., C.J. Savage, Z. Y-C Liu, and the Cassini RADAR Team** 2011. Landforms and Processes on Saturn's Moon Titan. AOGS Meeting, Taipei Taiwan, PS06-A026.
- Radebaugh, J.,** 2011. Geomorphology of Titan's dunes reveals past and present surface conditions. Titan Surface Workshop, Pasadena, CA.
- Radebaugh, J.,** 2011. Stabilized dunes on Titan? Titan Dunes Workshop, Pasadena, CA.
- Radebaugh, J., C.J. Savage, T.G. Farr, E. Heggy, O. Aharonson, and R.D. Lorenz** 2011. Linear dunes in the western Sahara as an analogue to dunes on Titan. GSA Rocky Mountain and Cordilleran Joint Meeting, Logan, UT, Paper 5-3.
- Radebaugh, J., K. Schleiffarth, E.H Christiansen** 2011. Internal stresses of Io are revealed by surface lineations. Lunar and Planetary Science Conference XLII, Abstract 2755.
- Radebaugh, J., B. Barth, K. Schleiffarth, R.M.C. Lopes and E.H Christiansen** 2011. Global volcanism and tectonism on Jupiter's moon Io as manifested in surface features. IAG Conference, Addis Ababa Ethiopia.
- Radebaugh, J., R.D. Lorenz, C.J. Savage, T.G. Farr, S.D. Wall, N. Lancaster, and the Cassini Radar Team** 2010. The Sahara Desert as an analogue to sand seas on Titan. Eos Trans. AGU, Fall Meet. Suppl., Abstract P13B-1374.
- Radebaugh, J., C.J. Savage, R.D. Lorenz, N. Lancaster, S.D. Wall, E.R. Stofan, J.I. Lunine, R.L. Kirk, A. Le Gall, and T.G. Farr** 2010. Dunes on Titan: Wind Directions, behavior, and evolution from statistical and morphological studies. 2nd International Planetary Dunes Workshop, Alamosa, CO, Abstract 2014.
- Radebaugh, J., R.D. Lorenz, C.J. Savage** 2010. Titan's Yin-yang equator: dunes and Xanadu. Titan Through Time, NASA Goddard, Cottini, Nixon, Lorenz eds., p. 29.
- Radebaugh, J., R.D. Lorenz, N. Lancaster, C.J. Savage, S.D. Wall, E.R. Stofan, J.I. Lunine, R.L. Kirk, and A. LeGall** 2010. Winds and sand transport patterns on Titan from dune interactions with topography. Lunar and Planetary Science Conference XLI, Abstract 2513.
- Radebaugh, J., V. Baker, R.D. Lorenz, T.G. Farr, R.M.C. Lopes, R.L. Kirk, E.R. Stofan, S.D. Wall, C.D. Wood, K.L. Mitchell, J.I. Lunine, M. Malaska, P. Valora, and the Cassini Radar Team** 2009. Fluvial Erosion on Titan: Scales and Landform Modification, AAS/Division for Planetary Sciences Meeting 41, #36.07.
- Radebaugh, J. and the Cassini Radar Team** 2009. Linear dune fields of Titan. 27th International Meeting of Sedimentologists, Alghero, Italy.
- Radebaugh, J., R. Lorenz, C. Savage** 2009. The Dunes of Titan: Distribution, Orientation, and Morphology from Cassini RADAR Imaging. 7th International Conference on Geomorphology, Melbourne.
- Radebaugh, J.** 2009. Evidence of extensional and compressional tectonism on Saturn's Moon Titan. Geological Society of America Meeting, Rocky Mountain Section.
- Radebaugh, J., P. Valora, R.D. Lorenz, S.D. Wall, R.L. Kirk, C.A. Wood, J.I. Lunine, E.R. Stofan, R.M. Lopes, T.G. Farr, G. Mitri and the Cassini RADAR Team** 2009. Evidence of extensional and compressional tectonism and erosion in Titan's Xanadu province. Lunar and Planetary Science Conference XXXX, Abstract 1037.
- Radebaugh, J. and E.H Christiansen** 2008. Magma chambers and calderas: A comparison between pluton and caldera sizes. Abstracts, IAVCEI annual meeting, Reykjavik.
- Radebaugh, J.,** 2008. Satellites of the Outer Solar System: Glimpses of Earth. American Association of Physics Teachers Annual Meeting, Edmonton, Canada, Invited talk.
- Radebaugh, J., R.D. Lorenz, C. Spencer, and the Cassini RADAR Team** 2008. Terrestrial analogues of longitudinal dunes on Titan. Planetary dunes workshop, Alamogordo, NM, Abstract 7037.
- Radebaugh, J., R.L. Kirk, R.M. Lopes, E.R. Stofan, P. Valora, J.I. Lunine, R.D. Lorenz, and the Cassini Radar Team** 2008, Mountains on Titan as evidence of global tectonism and erosion. Lunar and Planetary Science Conference XXXIX, Abstract 2206.
- Radebaugh, J., R. Lorenz, J. Lunine, S. Wall, C. Spencer, R.L. Kirk, R.M. Lopes, E.R. Stofan, M. Allison, P. Callahan and the Cassini Radar Team** 2007. Titan's sand seas of longitudinal dunes as indicators of winds and sediment transport. Eos Trans. AGU 88(52), Fall Suppl., Abstract 10910.
- Radebaugh, J., Lorenz, R.D., Lunine, J.I., Wall, S., Boubin, G., Reffet, E., Kirk, R.L., Lopes, R.M.C., Stofan, E.R., Soderblom, L., Allison, M., Callahan, P., and the Cassini RADAR Team,** 2007, Requirements for Longitudinal Dunes on Titan and Implications for Global Winds, Amer. Astron.

Soc. Bull., 39(3), 57.02.

- Radebaugh J.**, R. Lorenz, J. Lunine, S. Wall, G. Boubin, E. Reffet, R. Kirk, R. Lopes, E. Stofan, L. Soderblom, M. Allison, P. Callahan and the Cassini RADAR Team 2007. Longitudinal Dunes on Titan as Indicators of Global Climate, Workshop on Ices, Oceans, and Fire, Satellites of the Outer Solar System, Boulder, CO, Abstract 6005.
- Radebaugh, J.**, R. Lorenz, J. Lunine, and the Cassini Radar Team 2007, Longitudinal dunes on Titan: Distributions and indicators of winds, Spring EGU Meeting, Vienna, Abstract 04702.
- Radebaugh, J.**, R. Lorenz, J. Lunine, S. Wall, G. Boubin, E. Reffet, R. Kirk, R. Lopes, E. Stofan, L. Soderblom, M. Allison, P. Callahan and the Cassini Radar Team 2007, Dunes on Titan from Cassini Radar, Lunar and Planetary Science Conference XXXVIII, Abstract 1412.
- Radebaugh, J.**, R. Lorenz, J. Lunine, S. Wall, G. Boubin, E. Reffet, R. Kirk, R. Lopes, E. Stofan, L. Soderblom, M. Allison 2006. Longitudinal dunes on Titan as indicators of regional and local winds. Eos Trans. AGU (Fall Suppl.) 87(52), P12A-03 (abstract).
- Radebaugh, J.**, R. Lorenz, J. Lunine, S. Wall, G. Boubin, E. Reffet, R. Kirk, R. Lopes, L. Soderblom, and the Cassini Radar Team 2006, Orientations of dunes on Titan: Implications for global winds. Division of Planetary Sciences of the AAS, Meeting 38, Abstract 52.07.
- Radebaugh, J.**, R. Lorenz, R. Kirk, J. Lunine, and the Cassini Radar Team 2006. Mountains on Titan Observed by Cassini Radar. Lunar. Planet. Sci. XXXVII, 1007 (abstract).

Student Presentations

- Liu, Z., J. Radebaugh, R. Harris and the Cassini RADAR Team 2011. Mountains on Titan from Cassini Radar: Preliminary Analysis of Global Distribution and Structural Mapping. AOGS Meeting, Taipei Taiwan, PS06-A027.
- Liu, Z., and J. Radebaugh 2011. Mountains on Titan: Observations and analysis from Cassini Radar. GSA Rocky Mountain and Cordilleran Joint Meeting, Logan, UT, Paper 5-2.
- Schleiffarth, K., J. Radebaugh, E.H Christiansen, and B. Barth 2011. Tidal stresses produce regional deformation and volcano distributions and give insight into the subsurface of the jovian moon Io. GSA Rocky Mountain and Cordilleran Joint Meeting, Logan, UT, Paper 5-1.
- Savage, C.J. and J. Radebaugh 2011. Parameter analysis of Titan's dunes reveals surface evolution history. Lunar and Planetary Science Conference XLII, Abstract 2261.
- Liu, Z.Y.C., J. Radebaugh, R.L. Kirk, E.P. Turtle, E.R. Stofan, and C.A. Wood 2011. Mountains on Titan: Height and slope analysis. Lunar and Planetary Science Conference XLII, Abstract 2798.
- Arnold, K., J. Radebaugh, C.J. Savage, E.P. Turtle, R.D. Lorenz, E.R. Stofan, A. LeGall, and the Cassini Radar Team 2011. Areas of sand seas on Titan from Cassini Radar and ISS: Fensal and Aztlan. Lunar and Planetary Science Conference XLII, Abstract 2804.
- Liu, Z. 2011. Mountains on Titan. BYU College of Physical and Mathematical Sciences Student Research Conference.
- Savage, C.J. 2011. Pattern analysis of Titan's linear dunes reveals surface evolution history. BYU College of Physical and Mathematical Sciences Student Research Conference.
- Savage, C.J. and J. Radebaugh 2010. Dunes reveal Titan's recent history. Titan Through Time, NASA Goddard, Cottini, Nixon, Lorenz eds., p. 42.
- Savage, C.J. 2010. Dunes reveal Titan's recent history. BYU College of Physical and Mathematical Sciences Student Research Conference.
- Goodrich, C. 2010. Using Y-junctions as an interpretation of wind direction on Titan. BYU College of Physical and Mathematical Sciences Student Research Conference.
- Schleiffarth, K. 2010. Tectonics on Io. BYU College of Physical and Mathematical Sciences Student Research Conference.
- Malaska, M., J. Radebaugh, R. Lorenz, K. Mitchell, T. Farr, and E. Stofan 2010. Identification of karst-like terrain on Titan from valley analysis. Lunar and Planetary Science Conference XLI, Abstract 1544.
- Barth, B., J. Radebaugh and A. McKean 2010. Distribution and Comparison of Io's Paterae: Areas, Effective Diameters, and Active Volcanism. Lunar and Planetary Science Conference XLI, Abstract 2666.
- Savage, C.J., J. Radebaugh and C. Goodrich 2010. Titan dune populations from patterns analysis of dune field parameters. Lunar and Planetary Science Conference XLI, Abstract 2530.

- Allen, D.R. and J. Radebaugh 2009. Temperature and variability of three Ionian volcanoes. AAS/Division for Planetary Sciences Meeting 41, #66.02.
- Savage, C.J., J. Radebaugh, E.H. Christiansen 2009. Dune widths on Titan as indicators of surface moisture. Geological Society of America Meeting, Rocky Mountain Section, Abstracts with Programs, Vol 41, No. 6, p. 48.
- Barth, B., J. Radebaugh, E.H. Christiansen 2009. Longitudinal Distribution of Active Paterae on Io. Geological Society of America Meeting, Rocky Mountain Section. Abstracts with Programs, Vol 41, No. 6, p. 48.
- Barth, B. 2009. Distribution of active paterae on Io. BYU College of Physical and Mathematical Sciences Student Research Conference.
- Allen, D. 2009. Color temperature analysis of three Ionian hotspots. BYU College of Physical and Mathematical Sciences Student Research Conference.
- Daly, T. 2009. Computational studies of the Lunar time-of-flight mass spectrometer. BYU College of Physical and Mathematical Sciences Student Research Conference.
- Savage, C.J. and J. Radebaugh 2009. Titan as a laboratory for linear dune formation. Lunar and Planetary Science Conference XXXX, Abstract 1005.
- Barth, B., J. Radebaugh and E.H Christiansen 2009. Classification of Io's Paterae: Active vs inactive. Lunar and Planetary Science Conference XXXX, Abstract 2397.
- Allen, D. and J. Radebaugh 2009. Ionian volcanoes reveal their temperatures. Lunar and Planetary Science Conference XXXX, Abstract 1475.
- Savage, C.J. and J. Radebaugh 2009. Titan as a laboratory for Earth's linear dune formation. Utah Conference of Undergraduate Research, Westminster College.
- Barth, B.J. and J. Radebaugh 2009. Paterae: Io's Heat Vents. Utah Conference of Undergraduate Research, Westminster College.
- Spencer C. and J. Radebaugh, 2008. The Sand Seas of Titan: More like Earth than you might think. Utah Conference of Undergraduate Research, Utah Valley University.
- Valora, P.M. and J. Radebaugh 2008. Titan's mountains: Some interpretations on a shifting landscape. Utah Conference of Undergraduate Research, Utah Valley University.
- Spencer C. 2008. The Sand Seas of Titan: More like Earth than you might think. BYU College of Physical and Mathematical Sciences Spring Research Conference.
- Valora, P.M. 2008. Titan's mountains: Some interpretations on a shifting landscape. BYU College of Physical and Mathematical Sciences Spring Research Conference.
- Spencer, C., J. Radebaugh, R. Lorenz, S. Wall, J. Lunine, and the Cassini Radar Team, 2007. Comparative Analysis of Longitudinal Dunes on Saturn's Moon Titan and the Namib Desert: Ices, Oceans, and Fire: Satellites of the Outer Solar System Conference, Abstract 6006.
- Spencer, C., Radebaugh, J., Lorenz, R., Wall, S., Lunine, J., Kirk, R., Lopes, R., Stofan, E.R., and the Cassini Radar Team, 2007. Terrestrial and Martian Analogues to the Sand Seas on Titan: Geological Society of America Abstracts with Programs, 39, p. 571, Abstract 209-23.
- Dangerfield, A., J. Radebaugh, G. Carling, D. Tingey, J. Keith, and J. South 2007. Accuracy of MODIS on Kilauea eruption temperatures. Geophysical Research Abstracts 9, 05099.
- Carling, G., T. Saito, A. Dangerfield, J. Radebaugh, D. Tingey, J. Keith, and J. South 2007. Measuring lava eruptions temperatures with a digital camcorder at Kilauea volcano, Hawaii, USA. Geophysical Research Abstracts 9, 09039.