

Gwendolyn D. Bart, Ph.D.

Gwendolyn D. Barnes (legal name)	Office: McClure 401B
Department of Physics	Telephone: 208-885-5966
University of Idaho	Fax: 208-885-4055
Moscow, ID	Email: gbarnes@uidaho.edu
83844-0903	http://www.phys.uidaho.edu/gbarnes

Education

May 2007 Ph.D., Planetary Science, University of Arizona (UofA), Tucson, AZ, USA
Dec 1998 B.S., Chemistry, University of California, Santa Barbara (UCSB), USA

Research Experience

Assistant Research Professor, Department of Physics, University of Idaho (August 2008 — present)
Lunar surface structure and age from impact crater analysis.
Research Scientist, Carl Sagan Center, SETI Institute (March 2008 — present)
Characterization of lunar south pole terrain for NASA LCROSS Mission.
Research Scientist, Carl Sagan Center, SETI Institute (June 2007 — February 2008)
Physics of impact cratering and planetary implications.
Graduate Research Associate (August 2003 — May 2007)
Lunar surface geology from impact craters and their ejecta. Dr. H. Jay Melosh, advisor (UofA)
Graduate Research Assistant (January 2001 — July 2003)
Modeling Europa's tidal stress and cycloidal cracking. Dr. Richard Greenberg, advisor (UofA)
Graduate Research Assistant (January 2000 — December 2000)
Measurements of krypton and xenon in the nakhlites. Dr. Timothy Swindle, advisor (UofA)
Undergraduate Research Assistant (January 1998 — December 1998)
Photochemistry of Ru-salen compounds. Dr. Peter C. Ford, advisor (UCSB)

Publications

Bart, G.D.; Melosh, H.J. Impact Into Lunar Regolith Inhibits Formation of Highest Velocity Ejected Boulders. In preparation, to be submitted to *Icarus* (2008).
Bart, G.D.; Melosh, H.J. Using lunar boulders to distinguish primary from distant secondary impact craters. *Geophysical Research Letters* 34 (2007) L07203.
Bart, G.D. Comparison of small lunar landslides and martian gullies. *Icarus* 187 (2007) 417-421.
Bart, G. D., E. P. Turtle, W. L. Jaeger, L. P. Keszthelyi, and R. Greenberg 2004. Ridges and Tidal Stress on Io. *Icarus* **169** 111-126.
Greenberg, R., G. V. Hoppa, **G. D. Bart**, and T. A. Hurford 2003. Tidal Stress Patterns on Europa's Crust. *Cele. Mech.* **87**, 171-188.
Works, C. F., C. J. Jocher, **G. D. Bart**, X. Bu, and P. C. Ford 2002. Photochemical Nitric Oxide Precursors: Synthesis, Photochemistry, and Ligand Substitution Kinetics of Ruthenium Salen Nitrosyl and Ruthenium Salophen Nitrosyl Complexes. *Inorganic Chemistry* **41**, 3728-3739.

Presentations

Bart, G. D., A. Colaprete 2008. LCROSS Impact Site Characterization. *Lunar. Planet. Sci.* XXXIX poster (abstract #2225).
Bart, G. D., H. J. Melosh 2007. Boulders Untangle Primary from Secondary Craters. *Lunar. Planet. Sci.* XXXVIII talk (abstract #1501). (1 of 2 on this topic)
Bart, G. D. 2006. Comparison of Martian Gullies and Lunar Crater-Wall Landslides. *Lunar. Planet. Sci.* XXXVII poster (abstract #1345).

- Bart, G. D.**, H. J. Melosh. 2005 Lunar Far Side Regolith Depth. DPS poster (meeting #37, abstract #57.07).
- Bart, G. D.**, H. J. Melosh. 2005. Ejected Boulders: Implications for Secondary Craters and the Age Dating of Surfaces. *Lunar. Planet. Sci.* XXXVI talk (abstract #2022). (1 of 4 on this topic)
- Bart, G. D.**, E. P. Turtle, W. L. Jaeger, L. P. Keszthelyi, R. Greenberg 2003. Possible Surface Effects of Tidal Stress on Io. DPS talk (meeting #35, abstract#02.04). (1 of 2 on this topic)
- Bart, G. D.**, R. Greenberg, and G. V. Hoppa 2003. Cycloids and Wedges: Global Patterns from Tidal Stress on Europa. *Lunar. Planet. Sci.* XXXIV talk (abstract #1396). (1 of 2 on this topic)
- Bart, G. D.**, T. D. Swindle, E. K. Olson, and A. H. Treiman 2001. Xenon and Krypton in Nakhla Mineral Separates. *Lunar. Planet. Sci.* XXXII talk (abstract #1363). (1 of 2 on this topic)

Grant Support

Lunar Advanced Science and Exploration Research (LASER), NASA
Gwen Bart, Principal Investigator (PI) ; Jay Melosh, Collaborator
Title: Lunar Surface Structure and Age from Impact Crater Analysis
FTE: 0.5; Duration: 4 years
Status: Funded

Teaching Experience

2005 Fall: **Adjunct Faculty** at Pima Community College, Northwest Campus, in Tucson, AZ. Taught Chem 130IN, Introduction to Chemistry.

1999 Fall - 2005 Spring (11 semesters): **Teaching Assistant** at Univ. of Arizona. Taught NATS 101, 102, PTYS 206, Introduction to Planetary Science

Miscellaneous

2008: Served as scientific reviewer for the journal Planetary and Space Science, R. Schulz, editor.

2007: Served on NASA Mars Data Analysis Program (MDAP) grant review panel.

2005: Participated in JPL's TeamX Planetary Science Summer School.

2004-2005: Served one year as the graduate student representative to the Planetary Science faculty.

2002-2004: Served two years on Organizing Committee for the Lunar and Planetary Laboratory Conference, a two day scientific conference with a budget of \$6,000.00.

2002,05,06: University of Arizona graduate registration fellowship

1999-2007: Participated in 13 geology field trips to various locations in Arizona, Mexico, New Mexico, California, Washington state, west Texas, and Utah.

1998: Graduated with Highest Honors (top 2.5%) at UCSB

1998: Hughes Medical Institute Fellowship for summer research at UCSB

1998: McRary Prize, Phi Lambda Upsilon, UCSB

Professional societies

AGU – American Geophysical Union (<http://www.agu.org/>)
DPS – Division of Planetary Science of the American Astronomical Society (<http://dps.aas.org/>)

October 13, 2008