

# Curriculum Vitae: Catherine Louise Johnson

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## Employment History

- 2010 – present: *University of British Columbia, Vancouver.* Professor of Geophysics
- 2010 – present: *Planetary Science Institute, Tucson.* Senior Scientist
- 2006 – 2010: *University of British Columbia, Vancouver.* Associate Professor of Geophysics
- 2003 – 2007: *Scripps Institution of Oceanography.* Associate Professor of Geophysics
- 2001 – 2003: *Scripps Institution of Oceanography.* Assistant Professor of Geophysics
- 1998 – 2001: *Incorporated Research Institutions for Seismology (IRIS)*  
  Education & Outreach Program Manager
- 1995 – 1997: *Carnegie Institution of Washington.* Postdoctoral Researcher

## Education

- 1989 – 1994: *Scripps Institution of Oceanography, UCSD.* PhD in Geophysics
- 1985 – 1989: *University of Edinburgh, Edinburgh, Scotland.* B. Sc. Honors, Geophysics
- 1987 – 1988: *University of Pennsylvania, Philadelphia.* Junior year abroad

## Research Overview

My research focuses on geophysical investigations of terrestrial planets, moons and small bodies in our solar system, including the magnetic fields of Mercury, Mars, Earth and the Moon, the lithospheric structure and interior evolution of Venus, the seismicity and the interior structure of Mars and the Moon, and the surfaces and interior structure of asteroids. I use sample, observatory and satellite data to probe the interior structure and history of these bodies, and to understand how internal and external processes interact to shape a planet or moon's evolution. I have participated as an invited Co-I, or a competitively selected Co-I on several NASA missions.

## Mission Experience

- 2012 – present: Co-I, InSight Discovery Mission. Co-Chair, InSight Magnetics Working Group and member Science Leadership Committee (2018 – present).
- 2011 – present: Co-I, OSIRIS-REx Mission.
- 2015 – 2019: OSIRIS-REx Laser Altimeter (OLA) Deputy Instrument Scientist.
- 2007 – 2016: Participating Scientist, MESSENGER Mission. Vice Chair, Geophysics Group, MESSENGER Science Steering committee (2013-2016).

## Honors

- 2022: Killam Research Prize, University of British Columbia, Vancouver.
- 2019: Price Medal, Royal Astronomical Society
- 2019: Shen Kuo Award, International Association of Geomagnetism and Aeronomy, IUGG.
- 2018: Editor's Citation for Excellence in Refereeing, *J. Geophys. Res: Planets.*
- 2016: Asteroid 129980 named Catherinejohnson (1999 UN42).
- 2014: Bullard Lecturer, Geomagnetism, Paleomagnetism and Electromagnetism Section, American Geophysical Union (AGU) Fall Meeting.
- 2013: Fellow, American Geophysical Union.

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- 2009: 3-yr Canadian NSERC Discovery Accelerator Grant (2010-2013). 100 total are awarded each year across all NSERC Science and Engineering Disciplines.
- 2006 – 2007: Peter Wall Early Career Scholar, UBC.

## **Service to the Community (excludes university service)**

- 2022: Member, Solar Systems Working Proposal Review Panel, NASA.
- 2021 – 2022: Member, AGU Board of Directors
- 2021: Member, AGU Governance Task Force
- 2020 – 2023: Member, Scientific Committee, International Space Science Institute, Bern
- 2019 – 2024: Member, Scientific Committee, UnivEarthS Laboratory of Excellence, Paris. (Advisory committee for the use of the annual 1M Euro budget).
- 2019 – 2020: President, Geomagnetism, Paleomagnetism and Electromagnetism (GPE) Section, AGU.
- 2018: Member, Preliminary Design Review Board for ICEMAG, Europa Clipper Mission.
- 2017 – 2018: President-Elect GPE Section, AGU.
- 2017 – 2018: Chair, Fellows Committee, GPE Section, AGU.
- 2017 – 2018: Chair, Gilbert Award Committee, GPE Section, AGU.
- 2015: AGU awards committees: Fleming Medal, Gilbert Award, Fellows committee.
- 2014 – 2015: NSERC Discovery Grants Panel, Geosciences Evaluation Group.
- 2012: Organized MESSENGER Science Team Meeting (100+ people), Vancouver.
- 2011 – 2014: Advisory Board, Studies of the Earth’s Deep Interior.
- 2010: NSERC Industrial Chair Site Visit Committee, Univ. Western Ontario.
- 2010: Co-organized “Ground-Based Geophysics on the Moon” workshop, ASU.
- 2008 – 2010: AGU, Fall Meeting Program Committee Chair.
- 2008: Chair, Geophysics group, NASA LASER proposal review panel.
- 2008: Member, International Review Panel for U.K. proposed mission “MoonLITE”.
- 2004 – 2006: Secretary, Geomagnetism and Paleomagnetism section, AGU.
- 2005 – 2006: Geomagnetism and Paleomagnetism Fall Program Committee representative.
- 2006: National Academy of Sciences, National Research Council Space Studies Board review committee for NASA’s 2007-2016 Mars Architecture.
- 2004: Chair, NASA Proposal Review Panel to select Co-I for Japanese Lunar-A mission
- 2004 – 2006: Guest Editor, G-Cubed, AGU.
- 2001 – 2005: Assistant Editor, Geophysical Research Letters, AGU.
- 1998 – 2004: Committee on Education and Human Resources, AGU.
- 1998 – 2001: Professional development workshops for K-college educators throughout the U.S.
- 1998 – 2001: Workshops for Teach for America teachers on topics in earth science.
- 1998 – 2001: Development of museum exhibits at New Mexico Natural History Museum, Denver Museum of Science, American Museum of Natural History, Franklin Institute.
- 1997 – 1999: NASA Planetary Geology and Geophysics Program (PGG) Proposal Review Panel.
- 1997 – 1999: PGG Program Management Operations Working Group.
- 1998: NASA Planetary Instrument Definition and Development Proposal Review Panel.
- 1995 – 1998: NASA Cartography and Geological Mapping Working Group.

## **Invited Appointments and Lectureships**

- April – June 2022: Meierjurgen Faculty Fellow, Dept. of Earth Sciences, University of Oregon (fellowship postponed from 2020 because of Covid-19 pandemic).

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- 2019 – 2020: Green Scholar, Institute of Geophysics and Planetary Physics (IGPP), Scripps Institution of Oceanography.
- 2013: Short Course: “Mathematical Modeling of Geophysical Fluids”, African Institute for Mathematical Sciences, Cape Town, South Africa.
- 2012 – 2013: Visiting Scientist, Southwest Research Institute, Boulder.
- 2010 – present: Annual “Graduate Short Course in Planetary Science”, University of Western Ontario, Canada.
- 2008: Cooperative Institute for Deep Earth Research, (CIDER), Santa Barbara. USA.
- 2006: Invited Professor, Institut de Physique du Globe de Paris, Paris, France.

## **Selected Invited Seminars (last ~6 yrs)**

- 2022: Department of Earth Sciences, University of Oregon.
- 2021 (Zoom): Canadian Institute for Theoretical Astrophysics, Toronto, Canada.
- 2021 (Zoom): Department of Earth, Atmospheric and Planetary Sciences, MIT.
- 2021 (Zoom): Northern Arizona University.
- 2020 (Zoom): Dept. of Earth and Space Sciences, UCLA.
- 2019: Walter Munk Memorial Lecture, IGPP, Scripps Institution of Oceanography.
- 2019: Plenary Lecture, German Geophysical Society (DGG), 2019 Kongress.
- 2018: Dept. of Earth and Planetary Sciences, Johns Hopkins University
- 2017: William P. Smith Meeting, The Geological Society, London UK
- 2017: Massachusetts Institute of Technology, MA.
- 2016: Hampton University / National Institute of Aerospace, VA.
- 2015: Lamont Doherty Earth Observatory
- 2015: MESSENGER BepiColombo Workshop, DLR, Berlin, Germany.
- 2015: Lunar and Planetary Laboratory, University of Arizona.

## **Teaching**

I am committed to effective teaching at all levels including non-scientist first year students, upper division general science majors, specialist majors / Honors students or graduate students. These audiences present different opportunities and challenges in course design and implementation. I continued my professional development in education through active participation in the UBC Carl Weiman Science Education Initiative (<http://www.cwsei.ubc.ca>). I have developed and taught

- large enrollment Earth and planetary science courses, at the 1<sup>st</sup> year and 3<sup>rd</sup> year level (~60-180 students) for undergraduate non-scientists and general science majors,
- a 2<sup>nd</sup> year computing class (90-120 students) with labs for Earth Science Honors students,
- specialized third and fourth year undergraduate courses in geodynamics, remote sensing and planetary physics (~10-15 students) and
- graduate courses in planetary science, space physics, and in mathematics and inverse theory for geophysics, space physics.

## **Mentoring**

Primary Supervisor unless otherwise indicated:

*Research Associate (3):* L. Philpott (2012-2021), M. Russell (2020-2021), M. Al Asad (2016-2020).

*Postdocs (6):* A. Mittelholz (2019 – 2020), H. Susorney (2017-2019), A. Ritzer (2010–2013), K. Lawrence (2011–2012), J. Monteux (2009–2010), S. Mohit (2008–2010).

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*Graduate students (15):* A. Jackstet (MSc., in progress), S. Wanket (MSc., in progress), F. Rossman (MSc., in progress), E. Giroud (MSc., in progress; co-supervision with M. Jellinek), G. Peterson (PhD., in progress), M. Russell (MSc., 2020), A. Mittelholz (PhD, 2019), N. Urbancic (PhD, withdrew 2018). J-F. Blanchette-Guertin (PhD 2014), R. Winslow (PhD 2014), L. Ziegler (PhD. 2011, primary supervisor C. Constable), H. Uno (MSc 2009), K. Lawrence (PhD 2008), R. Weber (PhD 2007), R. Comstock (MSc 2004).

*Undergraduate Honors Theses (3):* N. Sarma (2021), J. Kalynn (2012), C. Hanneson (2016)

*Undergraduate Majors Research Projects (2):* A. Obertas (2015), M. Al Asad (2014).

*Summer or Short-Term Undergraduate Interns (10), K-12 teachers (3), high school students (1).*

*Graduate thesis committees (16).*

## Outreach

Interviews: CBC's Quirks and Quarks (2011, 2012, 2015, 2018), Discovery Channel, New Scientist, Australian Broadcasting Company, Science News, Forbes, Globe and Mail, New York Times, LA Times, C-FAX Radio, CTV News, Sky & Telescope (2012, 2015, 2018), Vancouver ScienceWorld "Future Science Leaders" Grade 10 program (2012). Consultant for Discovery Channel (2004), Science Museum Minnesota and Red Hill Studios, Sausalito (2001), and WNET, Public Television (1998).

Public talks (recent): Royal Astronomical Society of Canada, Vancouver and Sunshine Coast Chapters, 2016; Nerd Night, Vancouver, 2016; Macdonald Space Center, Vancouver, Aug 2018; Pacific Museum of Earth UBC, Nov. 2018; UBC Extended Learning, March 2019; The Vancouver Institute, 2020, Vancouver Women's PROBUS (**Professional Business**) Club, 2021.

Early Career Opportunities / Programs: Helped start and run the InSightSeer program (2021 - present) which provides opportunities for early career planetary scientists to participate in InSight Mission Science Team Meetings. Organized and ran an introductory InSight 101 session for the InSightSeers, participated in one-on-one mentoring and program organization.

## Funding History

Agency	Title	PI/Co-I	Year
Natural Sciences and Engineering Research Council of Canada (NSERC) Discovery Grant	Geophysical Investigations of Mars and Mercury	PI	2021-2026
Canadian Space Agency (CSA): Planetary Missions Co-Investigator	Magnetic Field Investigations of Mars with InSight <i>(support for my group members; my participation supported by NASA)</i>	PI	2019-2022
NASA, Discovery Data Analysis Program	Structure of Mercury's core and lithospheric magnetic fields from MESSENGER data	Co-I	2019-2022

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Natural Sciences and Engineering Research Council of Canada (NSERC) Discovery Grant	Magnetic Field Investigations of Mars and Mercury	PI	2016-2021
NSERC Promoscience and Promoscience Supplement	The Pacific Museum of the Earth Outreach Program	PI	2016-2018
Canadian Space Agency (CSA): Planetary Missions Co-Investigator	Geophysical Studies for the InSight Mission to Mars <i>(support for students; my participation supported by NASA)</i>	PI	2015-2019
Canadian Space Agency	Geophysical Investigations of Asteroid Bennu <i>(Science investigations support)</i>	PI	2016-2021
CSA / Public Works of Canada	OSIRIS REx (OLA) Support <i>(Operational support for the OSIRIS REx Laser Altimeter (OLA) and data product delivery)</i>	Co-I	2013-2021
NSERC CREATE	Technologies and Techniques for Earth and Space Exploration	Co-I	2011-2016
NSERC Discovery Grant	Geophysical Investigations of Earth, Moon and Mercury	PI	2009-2016
NSERC Promoscience	The Pacific Museum of the Earth Outreach Program	PI	2011-2015
NASA, Planetary Geology and Geophysics Program	The Lunar Magnetic Field Record	PI	2013-2015
NSERC Accelerator Award	Geophysical Investigations of Earth, Moon and Mercury	PI	2010-2013
UBC Faculty of Science	Active Earth (Seismic Display, Pacific Museum of the Earth, Earth and Ocean Sciences)	PI	2010-2011
NSERC Promoscience	The Pacific Museum of the Earth Outreach Program	PI	2008-2011
NASA, MESSENGER Participating Scientist Program	Investigations of Mercury's Magnetic Field	PI	2007-2016
NASA, Planetary Geology and Geophysics Program	Geophysical Investigations of the Moon	PI	2008-2011
NSERC Discovery Grant	Geophysical Studies of the Terrestrial Planets	PI	2007-2009
Peter Wall Institute (UBC, Vancouver)	Early Career Scholar	PI	2006-2007
NASA, Planetary Geology and Geophysics Program	Geophysical Investigations of the Terrestrial Planets	PI	2005-2008

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NSF, Geophysics Program	Modeling of the Geomagnetic Field on Million Year Time Scales	PI	2003-2006
NSF, Earth Sciences Directorate	Collaborative Proposal for Facility Support: Development and Maintenance of the Magnetics Information Consortium (MagIC)	Co-I	2003-2006
NSF, Digital Libraries	Bridging the Gap Between Libraries and Data Archives	Co-I	2001-2003
NASA, Planetary Geology and Geophysics Program	Geologic Mapping of the Sedna/Lavinia Region, Venus	Co-I	2001-2003
NSF, Professional Opportunities for Women in Research and Education (POWRE)	Building a Research Program in Geomagnetism and Paleomagnetism	PI	2000-2002
NASA, Planetary Geology and Geophysics Program	Comparative Studies of Planetary Lithospheres	PI	1999-2002
NSF, Geophysics Program	Time-Averaged Field Investigations	Co-I	1998-2001
NSF, Geophysics Program	Long Term Structure and Variability in the Geomagnetic Field	Co-I	1996-1999
NASA, Planetary Geology and Geophysics Program	Lithospheric Thickness Variations on Venus from Magellan Data	PI	1995-1998
NSF, Geophysics Program	Lava Flow Records of Paleosecular Variation from the Azores	Co-I	1995-1996

## Refereed Publications

**First authorship:** My philosophy is that work done by my students or postdocs should result in publications on which that individual is first author. Publications with the first author in bold font indicate a graduate student/post-doc/researcher, and in bold italic font an undergraduate student, supervised by me at the time the research was done.

1. McKenzie, D., P. G. Ford, C. Johnson, B. Parsons, D. Sandwell, S. Saunders & S. C. Solomon (1992). Features on Venus Generated by Plate Boundary Processes, *Journal of Geophysical Research: Planets*, 97, 13,533-13,544.
2. Johnson, C. L. & D. T. Sandwell (1992). Joints in Venusian Lava Flows, *Journal of Geophysical Research: Planets*, 97, 13, 601-13,610.
3. Johnson, C. L. & D. T. Sandwell (1994). Lithospheric flexure on Venus, *Geophysical Journal International*, 119, 627-647.
4. Sandwell, D. T., E. L. Winterer, J. Mammerickx, R. A. Duncan, M. A. Lynch, D. A. Levitt, D. A. & C. L. Johnson (1995). Evidence for diffuse extension of the Pacific plate from Pukapuka ridges and cross-grain gravity lineations, *Journal of Geophysical Research: Solid Earth*, 100, 15,087-15,099.
5. Johnson, C. L. & C. G. Constable (1995). The time-averaged geomagnetic field as recorded by lava flows over the past 5 Myr, *Geophysical Journal International*, 122, 489 - 519.

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6. Johnson, C. L. & C. G. Constable (1996). Palaeosecular Variation Recorded by Lava Flows over the past Five Million Years, *Philosophical Transactions of the Royal Society of London*, 354, #1704, 89-141.
7. Johnson, C. L. & C. G. Constable (1997). The time-averaged geomagnetic field: global and regional Biases for 0 - 5 Ma, *Geophysical Journal International*, 131, 643-666.
8. Sandwell, D. T., C. L. Johnson, F. Bilotti & J. Suppe (1997). Driving Forces for Limited Tectonics on Venus, *Icarus*, 129, 232-244.
9. Phillips, R. J., C. L. Johnson, S. J. Mackell, P. Morgan, D. T. Sandwell, & M. T. Zuber (1997). Lithospheric Mechanics and Dynamics of Venus, in *Venus II*, University of Arizona Press.
10. Johnson, C. L. & C. G. Constable (1998). Persistent Anomalous Pacific Geomagnetic Fields, *Geophysical Research Letters*, 25, 1011-1014.
11. Johnson, C. L., J. Wijbrans, C. G. Constable, J. Gee, H. Staudigel, L. Tauxe, V. H. Forjaz, & M. Salgueiro (1998).  $^{40}\text{Ar}/^{39}\text{Ar}$  ages and paleomagnetism of São Miguel lavas, Azores, *Earth and Planetary Science Letters*, 160, 637-649.
12. Zuber, M. T., D. E. Smith, J. B. Abshire, R. S. Azfal, O. Aharonson, K. Fishbaugh, P. G. Ford, H. V. Frey, J. B. Garvin, J. W. Head, A. B. Ivanov, C. L. Johnson, D. O. Muhleman, G. A. Neumann, G. H. Pettengill, R. J. Phillips, S. C. Solomon, X. Sun, H. J. Zwally, W. B. Banerdt, T. C. Duxbury (1998). Observations of the North Polar Region of Mars from the Mars Orbiter Laser Altimeter, *Science*, 282, 2053-2060.
13. Constable, C. G. & C. L. Johnson (1999). Anisotropic paleosecular variation models: implications for geomagnetic field observables, *Physics of the Earth and Planetary Interiors*, 115, 17-34.
14. Johnson, C. L., S. C. Solomon, J. W. Head, R. J. Phillips, M. T. Zuber & D. E. Smith (2000). Lithospheric Loading by the Northern Polar Cap on Mars, *Icarus*, 144, 313-328.
15. Constable, C. G., C. L. Johnson & S. P. Lund (2000). Global geomagnetic field models for the past 3000 years: transient or permanent flux lobes? *Philosophical Transactions of the Royal Society of London*, 358, 991-1008.
16. Smith, D. E., M. T. Zuber, H. V. Frey, J. B. Garvin, J. W. Head, D. O. Muhleman, G. H. Pettengill, R. J. Phillips, S. C. Solomon, H. J. Zwally, W. B. Banerdt, T. C. Duxbury, M. P. Golombek, F. G. Lemoine, G. A. Neumann, D. D. Rowlands, O. Aharonson, P. G. Ford, A. B. Ivanov, C. L. Johnson, P. J. McGovern, J. B. Abshire, R. S. Azfal & X. Sun (2001). Mars Orbiter Laser Altimeter: Experiment summary after the first year of global mapping of Mars, *Journal of Geophysical Research: Planets*, 106, 23,689 – 23,732.
17. Tauxe, L., C. G. Constable, C. L. Johnson, W. R. Miller, H. Staudigel (2003). Paleomagnetism of the southwestern USA recorded by 0-5 Ma igneous rocks, *Geochemistry, Geophysics, Geosystems*, 4 (4), doi: 10.1029/2002GC000343.
18. Johnson, C. L. & M. R. Richards (2003). A conceptual model for the relationship between coronae and large-scale mantle dynamics on Venus, *Journal of Geophysical Research: Planets*, 108 (E6), 5058, doi: 10.1029/2002JE001962.
19. D. Kilb, C. S. Keen, R. L. Newman, G. M. Kent, D. T. Sandwell, F. L. Vernon, C. L. Johnson, J.A. Orcutt (2003). The Visualization Center at Scripps Institution of Oceanography: Education and Outreach. *Seismological Research Letters*, 74, 641-648.
20. Johnson, C. L., & R. J. Phillips (2004). Evolution of the Tharsis region of Mars: Insights from magnetic field observations, *Earth and Planetary Science Letters*, 230, 241-254, doi:10.1016/j.epsl.2004.10.038.
21. **Bulow, R.**, C. L. Johnson, & P. Shearer (2005). New events discovered in the Apollo lunar seismic data. *Journal of Geophysical Research: Planets*, 110, E10003, doi:10.1029/2005JE002414.

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22. Solomon, S. C., O. Aharonson, J. M. Aurnou, W. B. Banerdt, M. H. Carr, A. J. Dombard, H. V. Frey, M. P. Golombek, S. A. Hauck, J. W. Head, B. Jakosky, C. L. Johnson, P. J. McGovern, G. A. Neumann, R. J. Phillips, D. E. Smith, M. T. Zuber (2005). New Perspectives on Ancient Mars, *Science*, 307, 1214-1220, doi: 10.1126/science.1101812, 2005.
23. Constable, C. G. & C. L. Johnson (2005). A paleomagnetic power spectrum. *Physics of the Earth and Planetary Interiors*, 153, 61-73, doi:10.1016/j.pepi.2005.03.015.
24. **Lawrence, K. L.**, C. G. Constable and C. L. Johnson (2006). Paleosecular variation and the average geomagnetic field at  $\pm 20^\circ$  latitude, *Geochemistry, Geophysics, Geosystems*, 7 (7), doi:10.1029/2005GC001181.
25. Dombard, A. J., C. L. Johnson, M. A. Richards & S. C. Solomon (2007). A Magmatic Loading Model for Coronae on Venus, *Journal of Geophysical Research: Planets*, 112, E04006, doi:10.1029/2006JE002731.
26. **Bulow, R.**, C. L. Johnson, B. G. Bills, P. M. Shearer (2007). Temporal and spatial properties of some deep moonquake clusters, *Journal of Geophysical Research: Planets*, 112, E09003, doi:10.1029/2006JE002847.
27. Lognonné, P. & C. L. Johnson (2007). Planetary Seismology, in *Treatise on Geophysics*, vol. 10, ch. 3. Editor-in-Chief: G. Schubert, Elsevier.
28. Johnson, C. L. & P. McFadden (2007). Time-Averaged Field and Paleosecular Variation, in *Treatise on Geophysics*, vol 5, ch. 11. Editor-in-Chief: G. Schubert, Elsevier.
29. Johnson, C. L., C. G. Constable, L. Tauxe, R. Barendregt, L. L. Brown, R. S. Coe, P. Layer, V. Mejia, N. D. Opdyke, B. S. Singer, H. Staudigel & D. B. Stone (2008). Recent investigations of the 0-5 Ma geomagnetic field recorded by lava flows, *Geochemistry, Geophysics, Geosystems*, 9(4), doi:10.1029/2007GC001696.
30. **Lawrence, K. L.**, C. L. Johnson, J. S. Gee & L. Tauxe (2008). Lunar paleointensity measurements: Implications for lunar magnetic evolution, *Physics of the Earth and Planetary Interiors*, 168, 71–87, doi:10.1016/j.pepi.2008.05.007.
31. Jellinek, M., C. L. Johnson & G. Schubert (2008). Constraints on the elastic thickness, heat flow and melt production at early Tharsis from topography and magnetic field observations, *Journal of Geophysical Research: Planets*, 113, E09004, doi:10.1029/2007JE003005.
32. Anderson, B. J., M. H. Acuña, H. Korth, M. E. Purucker, C. L. Johnson, J. A. Slavin, S. C. Solomon & R. L. McNutt, Jr (2008). The Structure of Mercury's Magnetic Field from MESSENGER's First Flyby, *Science*, 321, 82-85, doi:10.1126/science1159081.
33. **Ziegler, L.**, C. G. Constable & C. L. Johnson (2008). Testing the robustness and limitations of 0-1 Ma absolute paleointensity data, *Physics of the Earth and Planetary Interiors*, 170, 34-45, doi: doi:10.1016/j.pepi.2008.07.027.
34. **Lawrence, K. L.**, L. Tauxe, H. Staudigel, C. G. Constable, A. Koppers, W. McIntosh & C. C. L. Johnson (2009). Paleomagnetic field properties at high southern latitude, *Geochemistry, Geophysics, Geosystems*, 10 (1), doi:10.1029/2008GC002072.
35. **Uno, H.**, C. L. Johnson, B. J. Anderson, H. Korth & S. C. Solomon (2009). Modeling Mercury's internal magnetic field with smooth inversions, *Earth and Planetary Science Letters*, 285, issues 3-4, 328-339, doi:10.1016/j.epsl.2009.02.032.
36. **Mohit, P. S.**, C. L. Johnson, O. Barnouin-Jha, M. T. Zuber & S. C. Solomon (2009). Shallow basins on Mercury: Evidence of relaxation? *Earth and Planetary Science Letters*, 285, issues 3-4, 355-363, doi:10.1016/j.epsl.2009.04.023.
37. **Weber, R.**, B.G. Bills & C. L. Johnson (2009). Constraints on deep moonquake focal mechanisms through analyses of tidal stress, *Journal of Geophysical Research: Planets*, 114, E05001, doi:10.1029/2008JE003286.

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38. Lognonné, P.L., M. Le Feuvre, C. L. Johnson & R. Weber (2009). Moon meteoritic seismic hum: state prediction, *Journal of Geophysical Research: Planets*, 114, E12003, doi:10.1029/2008JE003294.
39. Anderson, B. J., M. H. Acuna, H. Korth, J. A. Slavin, H. Uno, C. L. Johnson, M. E. Purucker, S. C. Solomon, J. M. Raines, T. H. Zurbuchen, G. Gloeckler & R. L. McNutt (2009). The Magnetic Field of Mercury, *Space Science Reviews*, 152, 307-339, doi:10.1007/s11214-009-9544-3.
40. Aubert, J., C. L. Johnson & J. A. Tarduno (2010). Observations and Models of the Long-Term Evolution of Earth's Magnetic Field, *Space Science Reviews*, 155, 337-370, doi: 10.1007/s11214-010-9684-5.
41. Zuber, M. T., L. G. J. Montési, G. T. Farmer, S. A. Hauck II, J. Andreas Ritzer, R. J. Phillips, S. C. Solomon, D. E. Smith, M. Talpe, J. W. Head III, G. A. Neumann, T. R. Watters & C. L. Johnson (2010). Accommodation of lithospheric shortening on Mercury from altimetric profiles of ridges and lobate scarps measured during MESSENGER flybys 1 and 2, *Icarus*, 209, 247-255, doi:10.1016/j.icarus.2010.02.026, 2010.
42. Smith, D. E., M. T. Zuber, R. J. Phillips, S. C. Solomon, G. A. Neumann, F. G. Lemonine, S. J. Peale, J.-L. Margot, M. H. Torrence, M. J. Talpe, J. Head III, S. A. Hauck II, C. L. Johnson, M. E. Perry, O. Barnouin-Jha, D. K. Srinivasan & R. J. McNutt (2010). The equatorial shape and gravity field of Mercury from MESSENGER flybys 1 and 2, *Icarus*, 209, 88-100, doi:10.1016/j.icarus.2010.04.007.
43. Alexeev, I. I., E. S. Belenkaya, J. A. Slavin, D. H. Baker, B. J. Anderson, S. A. Boardsen, C. L. Johnson, H. Korth, M. E. Purucker, M. Sarantos & S. C. Solomon (2010). Mercury's magnetospheric magnetic field after the first two MESSENGER flybys, *Icarus*, 209, 23-29, doi:10.1016/j.icarus.2010.01.024.
44. **Weber, R.C.**, Bills, B.G. & C. L. Johnson (2010). A simple physical model for deep moonquakes, *Physics of the Earth and Planetary Interiors*, 182, #3-4, 152-160, doi:10.1016/j.pepi.2010.009.
45. Watters, T. & C. L. Johnson (2010). Lunar Tectonics, in *Planetary Tectonics*, Cambridge University Press.
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