

CURRICULUM VITAE - MIKI NAKAJIMA

CONTACT INFORMATION	Department of Terrestrial Magnetism Carnegie Institution for Science 5241 Broad Branch Road NW Washington, DC 20015 mnakajima@carnegiescience.edu (Carnegie) mnakajima@rochester.edu (Rochester)	
EDUCATION	California Institute of Technology Ph.D., Planetary Science (defended on Oct 30 2015) Minor in Computational Science and Engineering M.Sc., Planetary Science Advisor: D. J. Stevenson	Sep 2010 – Nov 2015 Sep 2010 – Jun 2013
	Tokyo Institute of Technology M.Sc., Earth and Planetary Sciences Advisors: S. Ida and H. Genda	Apr 2007 – Mar 2009
	University of California, Santa Cruz Exchange Program, Astronomy and Astrophysics Advisors: E. Asphaug and D. N. C. Lin	Sep 2007 – Jul 2008
	Tokyo Institute of Technology B.Sc., Earth and Planetary Sciences Advisors: S. Ida and M. Ikoma	Apr 2003 – Mar 2007
ACADEMIC EMPLOYMENT	University of Rochester Assistant Professor, Earth and Environmental Sciences Research Assistant Professor, Earth and Environmental Sciences Secondary appointment in Physics and Astronomy	Jul 2018 – Jun 2017 – Jun 2018
	Carnegie Institution for Science Carnegie Postdoctoral Fellow	Dec 2015 – Jun 2018
TEACHING EXPERIENCE	TA, Introduction to the Solar System, Caltech TA, Planetary Structure and Evolution, Caltech	Spring 2012, 2013 Spring 2014, 2015
MENTORING	Keegan Ryan, Caltech undergraduate student Binary planet formation (co-advised with D. J. Stevenson)	Jun – Sep 2013
AWARDS & HONORS	Carnegie DTM Postdoctoral Fellowship NASA Earth and Space Science Fellowship (NESSF) Murata Overseas Scholarship Yoshida Scholarship (fellowship for studying abroad) JSPS Research Fellowships for Young Scientists Moriyasu Graduate Student Scholarship Study Abroad Scholarship, Japan Student Services Organizations	2015 – 2018 2014 – 2015 2010 – 2012 (declined) 2010 – 2013 2010 2009 – 2010 2007 – 2008

PROFESSIONAL SERVICE Referee for Nature, Nature Geoscience, Nature Astronomy, Science, Philosophical Transactions of the Royal Society A, Earth and Planetary Science Letters, Icarus, Journal of Geophysical Research
Review Panelist and Executive Secretary for NASA programs

OUTREACH ACTIVITIES Organizer of Science Outreach Program: Planet Hunting in Tokyo Oct 2016
Presenter of Workshop on Studying Abroad at Tokyo Tech Jun 2016
Organizer of USA Science and Engineering Festival Apr 2016
Organizer of Community Science Event at Caltech Feb 2015
Organizer of Japanese Students' Visit at Caltech 2013 – 2015

INVITED SEMINARS May 2017 Origin of the Earth and Moon. TRR170 Seminar, Freie Universität Berlin, Berlin, Germany.
May 2017 Origin of the Earth and Moon. Seminar Series, University of Münster, Münster, Germany.
Mar 2017 Exploring Moons in the Solar System and Beyond. Special Seminar, University of Rochester, Rochester, NY, USA.
Mar 2017 Origin of the Earth and Moon. Special Seminar, University of Rochester, Rochester, NY, USA.
Feb 2017 Origin of the Earth and Moon. Special Seminar, University of Oxford, Oxford, UK.
Nov 2016 Origin of the Earth, the Moon, and exomoons. Astrophysics, Gravitation, and Cosmology Seminar, University of Illinois at Urbana-Champaign, Champaign, IL, USA.
Nov 2016 Implications of the Moon Formation for the Earth's Mantle and Magnetic Field. Geochemistry Seminar, University of Maryland, College Park, MA, USA.
Mar 2016 Controlled boiling on Enceladus: Model of the vapor-driven jets. Enceladus workshop, University of California, Berkeley, Berkeley, CA, USA.
Mar 2016 Origin of the Earth and Moon. Solar System Exploration Winter Seminar Series, NASA/Goddard Space Flight Center, Greenbelt, MA, USA.
Feb 2016 Origin of the Earth and Moon. Earth and Planetary Sciences Randolph Bromery Spring 2016 Seminar Series, Johns Hopkins University, Baltimore, MA, USA.
Feb 2016 Origin of the Earth and Moon. GeoSci Seminar, University of Chicago, Chicago, USA.
Nov 2015 Origin of the Earth and Moon. Plunch talk, University of California, Santa Cruz (UCSC), Santa Cruz, USA.
Sep 2015 Effects of giant impacts on planetary magnetic fields and exomoon formation. GFD Seminar, ETH Zurich, Zurich, Switzerland.
May 2015 Implications for mantle melting and the magnetic field from giant impact simulations. 2015 ACCRETE Group Meeting, Bayerisches Geoinstitut (BGI), Bayreuth, Germany.
May 2015 Implications for mantle melting, volatile loss, and the magnetic field from giant impact simulations, Brown University, Providence, RI, USA.

May 2015 Origin of the Earth and Moon, DEEPS Colloquia Series, Brown University, Providence, RI, USA.

Feb 2015 Moon formation recipes. iPLEX Lunch Talk, University of California, Los Angeles (UCLA), Los Angeles CA, USA.

Jan 2015 Origin of the Earth and Moon. DTM Weekly Seminar Series, Carnegie Institution of Washington DTM, Washington, DC, USA.

Nov 2014 Origin of the Earth and Moon and its implications for exomoon formation. Southwest Research Institute (SwRI), Boulder CO, USA.

Sep 2014 Initial states of the Earth's mantle and Moon-forming disk. GFD Seminar, ETH Zurich, Zurich, Switzerland.

Apr 2014 Do we understand the origin of the Moon? Woman in Aerospace Symposium, Massachusetts Institute of Technology (MIT), Boston MA, USA.

PEER-REVIEWED PUBLICATIONS **Nakajima, M.**, and Stevenson, D. J. Inefficient volatile loss from the Moon-forming disk: reconciling the giant impact hypothesis and a wet Moon. (in rev.)

Hauri, E. H., Saal, A. E., **Nakajima, M.**, Anand, M., Rutherford, M. J., Van Orman, J. A., and Le Voyer, M., 2017. Origin and Evolution of Water in the Moon's Interior. Annual Review of Earth and Planetary Sciences, vol 45. (in press.)

Jacobson, S. A., Rubie, D. C., Hernlund, J., Morbidelli, A., and **Nakajima, M.**, 2017. Formation, Stratification and Mixing of the Cores of Earth and Venus. Earth and Planetary Science Letters, 474, 375-386.

Nakajima, M., and Ingersoll, A. P., 2016. Controlled boiling on Enceladus. 1. Model of the vapor-driven jets. Icarus, 272, 309-318.

Ingersoll, A. P., and **Nakajima, M.**, 2016. Controlled boiling on Enceladus. 2. Model of the liquid-filled cracks, 272, 319-326.

Nakajima, M., and Stevenson, D. J., 2015. Melting and Mixing States of the Earth's Mantle after the Moon-Forming Impact. Earth and Planetary Science Letters, 427, 286-295.

Nakajima, M., and Stevenson, D. J., 2014. Investigation of the Initial State of the Moon-Forming Disk: Bridging SPH Simulations and Hydrostatic Models. Icarus, 233, 259-267.

Nakajima, M., and Genda, H., Asphaug, E. I., and Ida, S., Constraints on Exomoon Formation. (in prep.)

Nakajima, M., and Stevenson, D. J., Dynamical mixing of planetary cores by giant impacts. (in prep.)

OTHER PUBLICATIONS **Nakajima, M.**, 2016. Core Science: Stratified by a Sunken Impactor. Nature Geoscience, News & Views, 9, 734 - 735.

SELECTED
CONFERENCE
TALKS

Nakajima, M., and Canup, R. M., 2017. Origin of the Martian Moons and Their Water Abundances. 48th Lunar and Planetary Science Conference, 2900, The Woodlands TX, USA.

Nakajima, M., and Hauri, E. H., 2017. Initial Water Abundance of the Bulk Silicate Moon. 48th Lunar and Planetary Science Conference, 2858, The Woodlands TX, USA.

Nakajima, M., Rubie, D., Melosh, H. J., Nimmo, F., Jacobson, S. A., Morbidelli, A., 2016. Extent of Mantle Melting by Giant Impacts. Magma Oceanology Workshop, Atami, Japan. (*Invited*)

Nakajima, M., and Stevenson, D. J., 2016, Dynamical mixing of planetary cores by giant impacts. 47th Lunar and Planetary Science Conference, 2053, The Woodlands TX, USA.

Nakajima, M., and Stevenson, D. J., 2015. The state of the Earth's mantle after the giant impact. 2015 AGU Fall Meeting, San Francisco, USA. (*Invited*)

Nakajima, M., and Ingersoll, A. P., 2015. Controlled boiling on Enceladus: Model of the vapor-driven jets. 2015 AGU Fall Meeting, San Francisco, USA.

Nakajima, M., and Genda, H., Asphaug, E. I., and Ida, S., 2014. Constraints on Exomoon Formation. 46th DPS Meeting, Tucson AZ, USA.

Nakajima, M., and Stevenson, D. J., 2014. The Initial State of Earth's Mantle after the Moon-Forming Impact. International interdisciplinary workshop, Accretion and Early Differentiation of the Earth and Terrestrial Planets (ACCRETE), Nice, France.

Nakajima, M., and Stevenson, D. J., 2014. Moon-forming Disk - Formation and Water Loss. The proto-lunar disk splinter session, Accretion and Early Differentiation of the Earth and Terrestrial Planets (ACCRETE), Nice, France. (*Invited*)

Nakajima, M., and Stevenson, D. J., 2014. Hydrodynamic Escape does not Prevent the "Wet" Moon Formation. 45th Lunar and Planetary Science Conference, 2770, The Woodlands TX, USA.

Nakajima, M., and Stevenson, D. J., 2013, Thermodynamic Processes During the Moon-Forming Impact. 44th Lunar and Planetary Science Meeting, The Woodlands TX, USA.

Nakajima, M., and Stevenson, D. J., 2012, The Initial State of the Moon Forming Disk and the Earth's Mantle. 43rd Lunar and Planetary Science Meeting, The Woodlands TX, USA.