

Academic Staff Resume

Name: Yuji Harada

Title: Assistant Professor

Department: Space Science Institute

Lunar and Planetary Science Laboratory

Office: Room A502, Floor 5, Building A

Tel: +853 8897 2122

E-mail: yharada@must.edu.mo

Address: Avenida Wai Long, Taipa, Macau



Academic Qualification:

Bachelor of Science in Geoscience, University of Tsukuba, Japan, from 1998/04 to 2002/03.

Master of Science in Earth Evolution Science, University of Tsukuba, Japan, from 2002/04 to 2004/03.

Doctor of Science in Earth and Planetary Science, the University of Tokyo, Japan, from 2004/04 to 2008/03.

Teaching Area

Earth and Planetary Science

Research Area

Solid Earth and Planetary Physics

Working Experience

Teaching Assistant in Graduate School of Life and Environmental Sciences, University of Tsukuba, Japan, from 2002/05 to 2002/06.

Teaching Assistant in Graduate School of Life and Environmental Sciences, University of Tsukuba, Japan, from 2002/11 to 2003/02.

Teaching Assistant in Graduate School of Life and Environmental Sciences, University of Tsukuba, Japan, from 2003/04 to 2003/06.

Teaching Assistant in Graduate School of Life and Environmental Sciences, University of Tsukuba, Japan, 2004/01.

Research Assistant in Earthquake Research Institute, University of Tokyo, Japan, from 2004/07 to 2004/11.

Research Assistant in Graduate School of Science, University of Tokyo, Japan, from 2005/04 to 2007/03.

Research Assistant in National Astronomical Observatory of Japan, National Institutes of Natural Sciences, Japan, from 2005/06 to 2006/03.

Research Assistant in National Astronomical Observatory of Japan, National Institutes of Natural Sciences, Japan, from 2006/06 to 2007/03.

Research Assistant in Earthquake Research Institute, University of Tokyo, Japan, from 2007/05 to 2007/10.

Postdoctoral Researcher in National Astronomical Observatory of Japan, National Institutes of Natural Sciences, Japan, from 2008/04 to 2010/03.

Postdoctoral Researcher in Earthquake Research Institute, University of Tokyo, Japan, from 2010/04 to 2010/07.

Postdoctoral Researcher in Shanghai Astronomical Observatory, Chinese Academy of Sciences, China, from 2010/08 to 2012/06.

Postdoctoral Researcher in Earthquake Research Institute, University of Tokyo, Japan, from 2012/07 to 2013/03.

Postdoctoral Researcher in School of Earth Sciences, China University of Geosciences, China, from 2013/04 to 2015/01.

Assistant Professor in Space Science Institute, Macau University of Science and Technology, China, from 2015/02.

Academic Publication

Journal Articles:

Y. Harada and K. Kurita, The dependence of surface tidal stress on the internal structure of Europa: The possibility of cracking of the icy shell, *Planetary and Space Science*, 54 (2), 170-180, 2006.

Y. Harada and K. Kurita, Effect of non-synchronous rotation on surface stress upon Europa: Constraints on surface rheology, *Geophysical Research Letters*, 34 (11), 1-5, 2007.

F. Kikuchi, Q. Liu, H. Hanada, N. Kawano, K. Matsumoto, T. Iwata, S. Goossens, K. Asari, Y. Ishihara, S. Tsuruta, T. Ishikawa, H. Noda, N. Namiki, N. Petrova, Y. Harada, J. Ping, and S. Sasaki, Picosecond accuracy VLBI of the two subsatellites of SELENE (KAGUYA) using multifrequency and same beam methods, *Radio Science*, 44, 1-7, 2009.

Q. Liu, F. Kikuchi, K. Matsumoto, S. Goossens, H. Hanada, Y. Harada, X. Shi, Q. Huang, T. Ishikawa, S. Tsuruta, K. Asari, Y. Ishihara, N. Kawano, S. Kamata, T. Iwata, H. Noda, N. Namiki, S. Sasaki, S. Ellingsen, K. Sato, K. Shibata, Y. Tamura, T. Jike, K. Iwadate, O. Kameya, J. Ping, B. Xia, T. An, Q. Fan, X. Hong, W. Yang, H. Zhang, Y. Aili, B. Reid, W. Hankey, J. McCallum, G. Kronschnabl, and W. Schlüter, Same-beam VLBI observations of SELENE for improving lunar gravity field model, *Radio Science*, 45, 1-16, 2010.

H. Hanada, T. Iwata, Q. Liu, F. Kikuchi, K. Matsumoto, S. Goossens, Y. Harada, K. Asari, T. Ishikawa, Y. Ishihara, H. Noda, S. Tsuruta, N. Petrova, N. Kawano, S. Sasaki, K. Sato, N. Namiki, Y. Kono, K. Iwadate, O. Kameya, K. M. Shibata, Y. Tamura, S. Kamata, Y. Yahagi, W. Masui, K. Tanaka, H. Maejima, X. Hong, J. Ping, X. Shi, Q. Huang, Y. Aili, S. Ellingsen, and W. Schlüter, Overview of Differential VLBI Observations of Lunar Orbiters in SELENE (Kaguya) for Precise Orbit Determination and Lunar Gravity Field Study, *Space Science Reviews*, 154 (1-4), 123-144, 2010.

S. Goossens, K. Matsumoto, Q. Liu, F. Kikuchi, K. Sato, H. Hanada, Y. Ishihara, H. Noda, N. Kawano, N. Namiki, T. Iwata, F. G. Lemoine, D. D. Rowlands, Y. Harada, and M. Chen, Lunar gravity field determination using SELENE same-beam differential VLBI tracking data, *Journal of Geodesy*, 85 (4), 205-228, 2011.

J. Yan, S. Goossens, K. Matsumoto, J. Ping, Y. Harada, T. Iwata, N. Namiki, F. Li, G. Tang, J. Cao, H. Hanada, and N. Kawano, CEGM02: An improved lunar gravity model using Chang'E-1 orbital tracking data, *Planetary and Space Science*, 62 (1), 1-9, 2012a.

J. Yan, F. Li, J. Ping, J. M. Dohm, Y. Harada, and Z. Zhong, A simulation of Martian gravity field recovery by using a near equatorial orbiter, *Advances in Space Research*, 49 (5), 1019-1027, 2012b.

Y. Harada, Long-term polar motion on a quasi-fluid planetary body with an elastic lithosphere: Semi-analytic solutions of the time-dependent equation, *Icarus*, 220 (2), 449-465, 2012.

S. Kamata, S. Sugita, Y. Abe, Y. Ishihara, Y. Harada, T. Morota, N. Namiki, T. Iwata, H. Hanada, H. Araki, K. Matsumoto, and E. Tajika, Viscoelastic deformation of lunar impact basins: Implications for heterogeneity in the deep crustal paleo-thermal state and radioactive element concentration, *Journal of Geophysical Research*, 118 (3), 398-415, 2013.

Y. Harada, S. Goossens, K. Matsumoto, J. Yan, J. Ping, H. Noda, and J. Haruyama, Strong tidal heating in an ultralow-viscosity zone at the core-mantle boundary of the Moon, *Nature Geoscience*, 7 (8), 569-572, 2014.

Y. Harada and L. Xiao, A timescale of true polar wander of a quasi-fluid Earth: An effect of a low-viscosity layer inside a mantle, *Physics of the Earth and Planetary Interiors*, 240 (1), 25-33, 2015.

S. Kamata, S. Sugita, Y. Abe, Y. Ishihara, Y. Harada, T. Morota, N. Namiki, T. Iwata, H. Hanada, H. Araki, K. Matsumoto, E. Tajika, K. Kuramoto, and F. Nimmo, The relative timing of Lunar Magma Ocean solidification and the Late Heavy Bombardment inferred from highly degraded impact basin structures, *Icarus*, 250 (1), 492-503, 2015.

Y. Harada, S. Goossens, K. Matsumoto, J. Yan, J. Ping, H. Noda, and J. Haruyama, The deep lunar interior with a low-viscosity zone: Revised constraints from recent geodetic parameters on the tidal response of the Moon, *Icarus*, Under Review.

Books & Book Chapters:

Not Applicable

Conference Papers:

Not Applicable

Research Projects

Not Applicable

Professional Certification and Awards

Passing, Level 1, Chinese Proficiency Test, China, 2014/06.

Passing, Level 2, Chinese Proficiency Test, China, 2014/07.

Passing, Level 3, Chinese Proficiency Test, China, 2015/01.

Passing, Level 4, Chinese Proficiency Test, China, 2015/03.

Professional Society Membership

Japan Geoscience Union

Japanese Society for Planetary Sciences

Geodetic Society of Japan

Astronomical Society of Japan

American Geophysical Union

European Geosciences Union

Asia Oceania Geosciences Society