

Camilla D. K. Harris, PhD Candidate

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| CURRENT RESEARCH | Space plasma physics and moon-magnetosphere interaction. The generation and variation of Europa's ionosphere and its interaction with Jupiter's magnetosphere. Science team affiliate of NASA's Europa Clipper mission. |
| EDUCATION | University of Michigan , Ann Arbor, MI Department of Climate and Space Sciences and Engineering (CLaSP), Sept. 2016 – Present <ul style="list-style-type: none">• PhD Candidate as of May 2018• Certificate in Computational Discovery and Engineering• Advised by Professors Xianzhe Jia and James A. Slavin University of California Los Angeles , Los Angeles, CA Department of Physics and Astronomy, Sept. 2011 – June 2015 <ul style="list-style-type: none">• Graduated with Bachelors of Science in Physics• Minor in Mathematics |
| PAST RESEARCH POSITIONS | Science Undergraduate Laboratory Internships (SULI), Los Alamos National Laboratory <ul style="list-style-type: none">• September 2015 – May 2016• Advised by Dr. Mike Henderson.• Completed two projects studying injections in the inner magnetosphere through data analysis and modeling. Science and Engineering Student Internship (SESI), NASA Goddard Space Flight Center <ul style="list-style-type: none">• June 2015 – September 2015• Advised by Dr. Alex Glozer.• Studied the effects of soft electron precipitation on ionospheric outflow in the cusp region of the magnetosphere using the Polar Wind Outflow Model with Kinetic effects. Electron Losses and Fields Investigation (ELFIN), UCLA <ul style="list-style-type: none">• July 2014 – June 2015• ELFIN is a CubeSat developed by UCLA undergraduate students and staff to study the loss of electrons from the Earth's radiation belts. It was launched in September 2018.• Developed physics simulations for the Attitude Determination and Control Subsystem. Undergraduate Work-Study with NASA's THEMIS mission, UCLA <ul style="list-style-type: none">• November 2013 – June 2015• Advised by Dr. Christine Gabrielse-Lin and Prof. Vassilis Angelopoulos.• Modeled substorm injections in the Earth's magnetotail. Developed code to calculate and process model results and to analyze and compare data from THEMIS spacecraft. |
| REFEREED JOURNAL PUBLICATIONS | [1] Gabrielse, C., Angelopoulos, V., Harris, C. , et al. (2017). Extensive electron transport and energization via multiple, localized dipolarizing flux bundles. <i>Journal of Geophysical Research: Space Physics</i> , 122. doi:10.1002/2017JA023981 [2] Gabrielse, C., Harris, C. , et al. (2016). The role of localized inductive electric fields in electron injections around dipolarizing flux bundles. <i>Journal of Geophysical Research: Space Physics</i> , 121. doi:10.1002/2016ja023061 |

SELECTED
TALKS

- [3] Harris, C. D. K. (June 2019). *Numerical Modeling: PIC, MHD, Hybrid*. Geospace Environment Modeling Workshop Student Day; Santa Fe, NM.
- [4] Harris, C. D. K., Jia, X., Slavin, J. A., Toth, G. and Rubin, M. (July 2018). *Quantifying the access of Jupiter's magnetospheric plasma to Europa's surface through a multi-fluid MHD model*. Committee on Space Research Scientific Assembly; Pasadena, CA.
- [5] Harris, C. D. K., Jia, X., Slavin, J. A., Rubin, M. and Toth, G. (Dec 2017). *Multi-fluid MHD simulations of Europa's interaction with Jupiter's magnetosphere*. American Geophysical Union (AGU) Fall Meeting; New Orleans, LA.
- [6] Harris, C. D. K. (June 2017). *Magnetotail Dipolarization and its effects on the Inner Magnetosphere*. Geospace Environment Modeling Workshop Student Day; Portsmouth, VA

SELECTED
POSTERS

- [7] Harris, C. D. K., Jia, X., Slavin, J. A., Toth, G. and Rubin, M. (June 2019). *Multifluid MHD simulations of Europa's Plasma Interaction with Jupiter's Magnetosphere*. Magnetospheres of the Outer Planets Conference; Sendai, Japan.
- [8] Harris, C. D. K., Jia, X., Slavin, J. A., Toth, G. and Rubin, M. (September 2018). *The Role of Jupiter's Magnetospheric Plasma in Europa's Plasma Interaction*. 13th International School/Symposium for Space Simulations; Los Angeles, CA. Also presented at the 2018 AGU Fall Meeting; Washington, DC.

ACADEMIC
SERVICE

- CLaSP Graduate Peer Mentorship Program Organizer, Winter 2017 and Fall 2017, 2018
- CLaSP PhD Student Handbook Development Committee, Chair, January – April 2017
- 12th APS Conference for Undergraduate Women in Physics at UCLA, Proposal and Planning Committee, April – June 2015
- UCLA Women in Physical Sciences, Publicity Officer, September 2014 – June 2015
- UCLA Society of Physics Students, Vice President, September 2013 – June 2015

AWARDS,
WORKSHOPS
& SCHOOLS

- Michigan Space Grant Fellow, May 2019
- Keck Institute for Space Studies: Tidal Heating – Lessons from Io and The Jovian System, October 2018
- 13th International School/Symposium for Space Simulations (ISSS-13), Poster Session Silver Prize, September 2018
- Engineering Graduate Symposium, ACS-SPS Poster Session First Prize, November 2017
- UCAR Heliophysics Summer School, August 2017
- Rackham Merit Fellow, September 2016 – Present
- 12th International School/Symposium for Space Simulations (ISSS-12), July 2015
- California Space Grant Scholar, April 2014; March 2015
- 10th APS Conference for Undergraduate Women in Physics at UCSC, Poster Session First Prize, January 2015