

**Divya M. Persaud**  
**Mullard Space Science Laboratory**  
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## Education

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University College London, United Kingdom 2017 – 2020 (expected)  
Ph.D., Space & Climate Physics (Planetary & Imaging Groups)

University of Rochester, Rochester, NY 2012 – 2017  
B.A., High Honors in Research, Geology/Music Composition, GPA 3.33

## Publications and Selected Presentations

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Brydon, G., **Persaud, D. M.**, Jones, G., A study of stereo DTM generation from a planetary penetrator descent camera. *In review (AISR)*.

Xiong, S., **Persaud, D. M.**, et al., 2020, Subsurface reflections detected by SHARAD data revealing buried channels and islands over the Elysium Planitia, *Earth and Space Sciences*.

**Persaud, D. M.**, et al., Multi-Resolution, Remote 3D geological analysis of possible sedimentary layer geometries in upper Aeolis Mons, Gale Crater, Mars. European Planetary Science Congress, Virtual, 21-30 September 2020. Abstract #450. Oral presentation. *Journal pub. in preparation*.

**Persaud, D. M.**, et al., Multi-Resolution, Nested Orbital 3D Images of Gale Crater for Fused MSL Rover-Orbital Image Simulations. European Planetary Science Congress, Geneva, Switzerland, 16-20 September 2019. Abstract #1540. Oral presentation.

**Persaud, D. M.**, et al., 2016. HOMER: a smallsat ground penetrating radar sounding fleet to map planetary surfaces at high resolution. *Lunar Planet. Sci. XLVII*, 3051 (abstract).

**D. M. Persaud**, C. B. Phillips, Methods of Estimating Initial Crater Depths on Icy Satellites, Abstract 17043, 2014 Fall Meeting, AGU, San Francisco, CA, 15-19 Dec. Oral presentation.

## Research

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Postdoctoral Scholar, NASA Jet Propulsion Laboratory Jan. 2021 –  
Characterizing the surface properties of Europa for the Europa Lander.

Ph.D. Student, Mullard Space Science Laboratory, University College London 2017 – present  
Processing and applying 3D orbital imagery to geological analysis of Gale crater, Mars.

JPL Summr Internship Program, NASA Jet Propulsion Laboratory 2016  
Stereo topography, relaxation of impact craters on Saturnian moons using Cassini ISS DEMs; catalog of crater measurements and relaxation percentages for four moons.

Undergraduate Research, University of Rochester 2015 – 16

- Identified rare chromite species in the Allende meteorite using SEM/XR spectroscopy.
- Honors thesis: Science mission design for HOMER with 2015 NASA Academy team.

NASA Ames Academy for Space Exploration, NASA Ames Research Center 2015  
Geology lead, project manager weeks 8-10: team instrument design for a smallsat GPR/SAR fleet to characterize lava tube systems on Mars (“HOMER”); lunar design 2015-2016.

NSF Research Experience for Undergraduates in Astrobiology, SETI Institute 2014

Investigating initial crater depths of Saturn's moons using Cassini ISS DEMs.

NSF Research Experience for Undergraduates in Physics, University of Rochester 2013

Magnetic tests on Darwin impact glass samples to determine whether and constrain how a magnetic field was generated by the Darwin impact.

Research Assistantship, University of Rochester 2012 – 13

Documentation and preparation of Fukang pallasite meteorite samples; initial magnetic tests to characterize magnetization.

High School Internship, NASA Goddard Space Flight Center 2011, 2012

Adapted a method of passive radiometry (MOLA) for the Mercury Laser Altimeter to generate a reflectance map of Mercury at 1064 nm.

## Training and Field Experience

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PanCam team member, ExoFIT ExoMars field trials 1 & 2, Harwell, UK Feb. 2019, Oct. 2018

GeoPlaNet thematic school: Fluid-Rock Interactions, University of Nantes, Fr. Nov. 2018

SPICE Training, ESAC, Madrid, Spain June 2018

Intro. to Flying a Drone for Research, UCL, Maidstone, Kent, UK May 2018

Comparative planetology & radio astronomy field class, Lassen, CA July 2014

## Awards

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Elizabeth Puchnarewicz Award for Outstanding Contribution to Public Outreach, UCL 2018

Dean's Scholarship, University of Rochester 2012 – 16

## Grants

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"Space Science in Context" Workshop, Researcher-led Initiative Award, UCL 2020

Europlanets Travel Grant, European Planetary Science Congress 2019

MSSL Travel Grant, European Geophysical Union, European Planet. Sci. Congress 2018,19

Outreach Development Grant, Spacelink Learning Foundation 2019

## Selected Speaking, Engagement, and Organizing

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Recent invited speaking:

Women in Space Seminar Series (virtual) Oct. 2020

Centre for Outer Space Studies Launch (virtual) Oct. 2020

TIGER in STEMM Webinar Series in Physics (virtual) Sept. 2020

Lunchtime Q&A, The Geological Society (virtual) June 2020

Organizer, Space Science in Context Conference (virtual) May 2020

Asst. Educational Outreach Consultant, Spacelink Learning Foundation 2018 – 2019

Organizer, "Mission to Mars" Sutton Scholars Discovery Day, UCL May 2019, Feb. 2018

Co-convenor, Building Habitable Worlds IV, UK Centre for Astrobiology 6 Aug. 2018

## Professional Membership

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IAS Centre for Outer Space Studies 2020 – present

Institute of Physics 2019 – present

European Geosciences Union 2018 – present

UCL/Birkbeck Centre for Planetary Sciences 2018 – present

UK Planetary Forum 2017 – present

Sigma Gamma Epsilon Geology Honors Society, Zeta Phi Chapter 2016 – present

American Geophysical Union 2014 – present