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01 — LEADERSHIP

From the Director

Welcome to the first issue of the Planetary Research Programs Community Update.

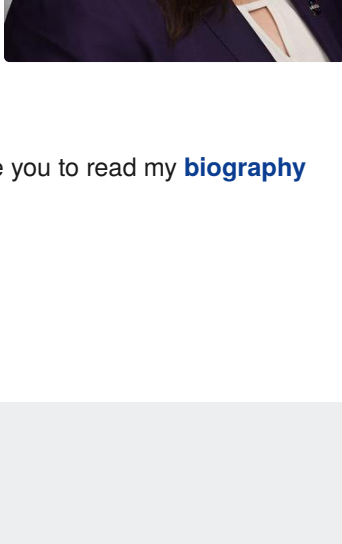
This newsletter is designed to bring together important program information, updates, opportunities, and reminders in one place for the planetary research community.

My goal in launching it is to support greater transparency and make it easier for the community to stay informed about key information and resources. I hope this update will serve as a useful and reliable resource for researchers across the community.

Thank you for your contributions to planetary research and for the work you do in support of NASA science. I hope you find this newsletter valuable.

For those interested in learning more about my career and research background, I invite you to read my [biography here](#).

Kathleen Vander Kaaden, Ph.D.
Director of Planetary Research Programs, NASA Headquarters



02 — MARK YOUR CALENDAR

Key Dates & Deadlines

Date	Item	What It Is
Sept. 16, 2026	Planetary Science Early Career Award 2024 Showcase Join here	Event · 3–5 p.m. ET
Oct. 6–8, 2026	Committee on Astrobiology and Planetary Sciences Autumn Meeting More information	Event · In person
Nov. 10, 2026	Planetary Science Enabling Facilities (PSEF) — ROSES-25 View on NSPIRES	Proposal deadline
On or before 11/12/2026	SCubed — new cycle	Proposal deadline
Open — no deadline	Rolling Reviewer volunteer form Submit here	

03 — RECENT SELECTIONS BY THE NUMBERS

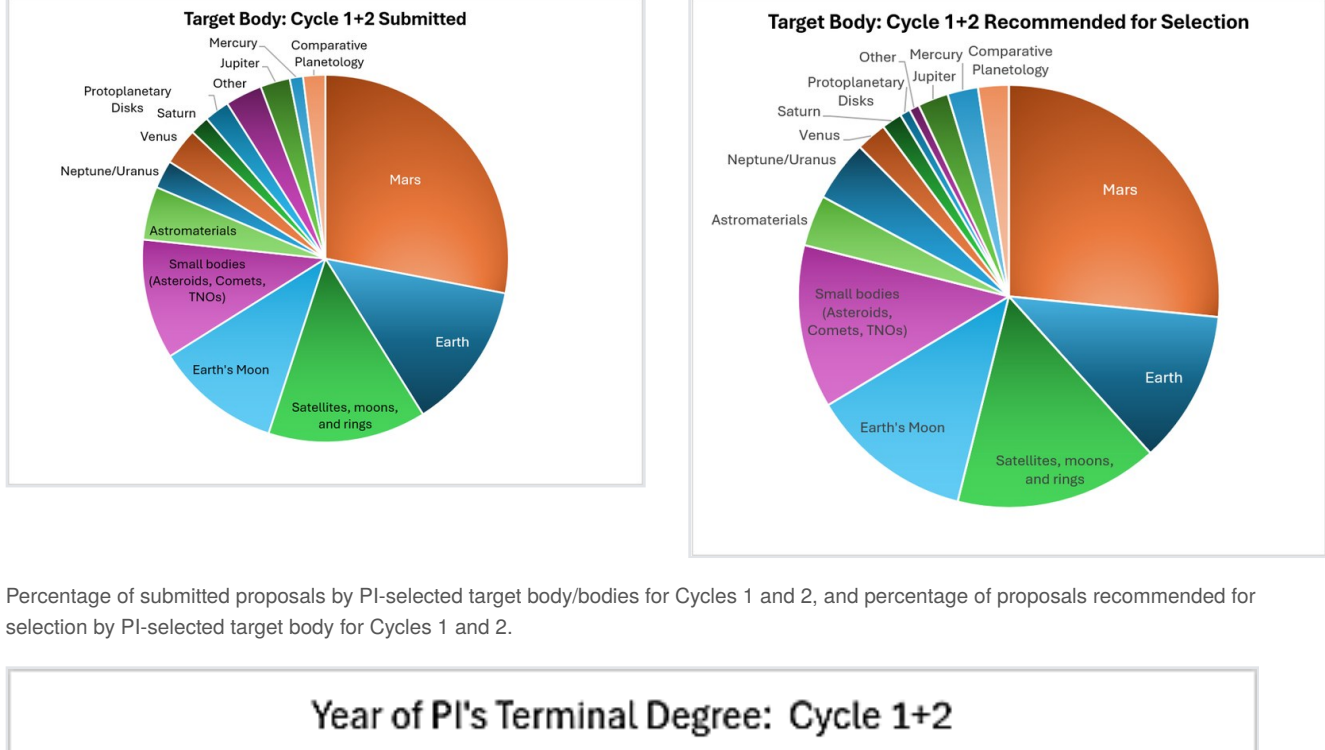
Selection Results

Selection statistics from recent competitions are provided to enhance transparency in programmatic priorities and the breadth of research supported by the Planetary Research Programs.

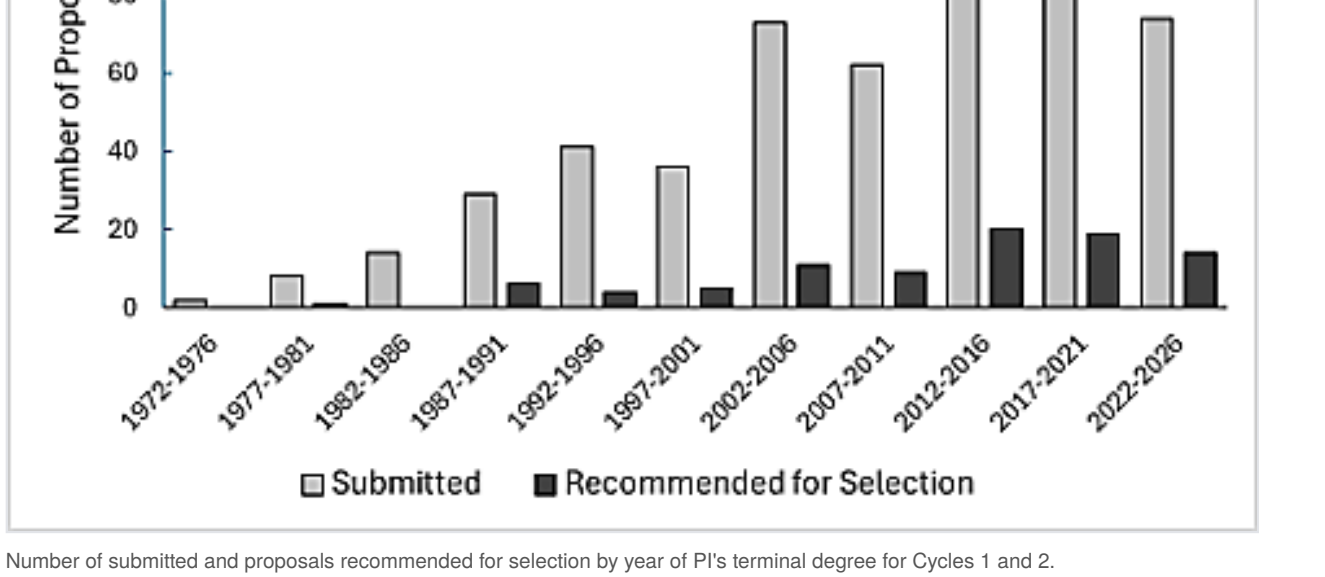
Solar System Science (SCubed) — Cycles 1 and 2

At the time of publication, 1,262 proposals have been submitted to the Solar System Science Program. Thus far, two cycles of review have been completed, which includes the review of 513 proposals and 93 proposals recommended for selection. Of the 513 reviewed proposals, 302 were triaged out of panel discussion. Only a grants officer can make the final selection decision and award a grant or cooperative agreement. The data provided below are solely for the first two cycles where review and selection recommendations have been completed.

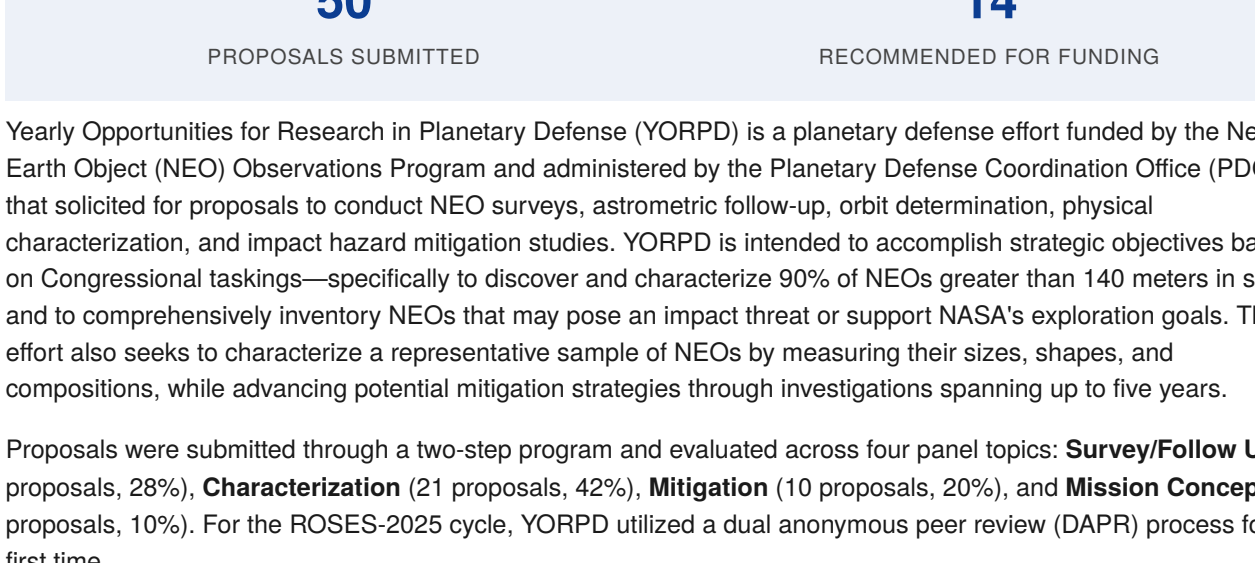
[View SCubed selection information on NSPIRES](#)



Percentage of submitted proposals by PI-selected primary decadal survey topic for Cycles 1 and 2, and percentage of proposals recommended for selection by PI-selected primary decadal survey topic for Cycles 1 and 2.

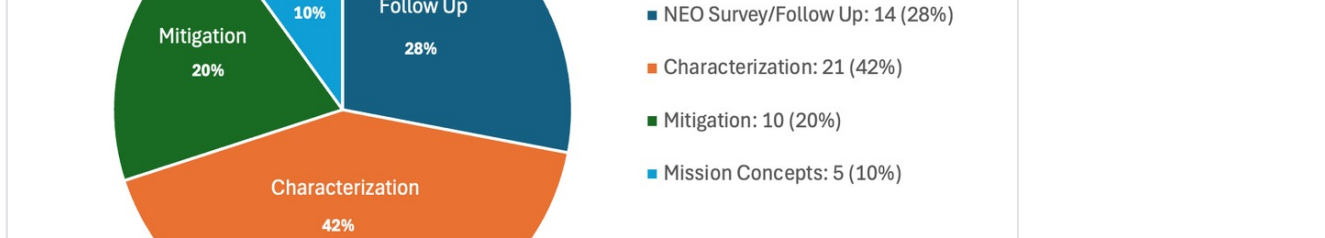


Percentage of submitted proposals by PI-selected target body/bodies for Cycles 1 and 2, and percentage of proposals recommended for selection by PI-selected target body for Cycles 1 and 2.



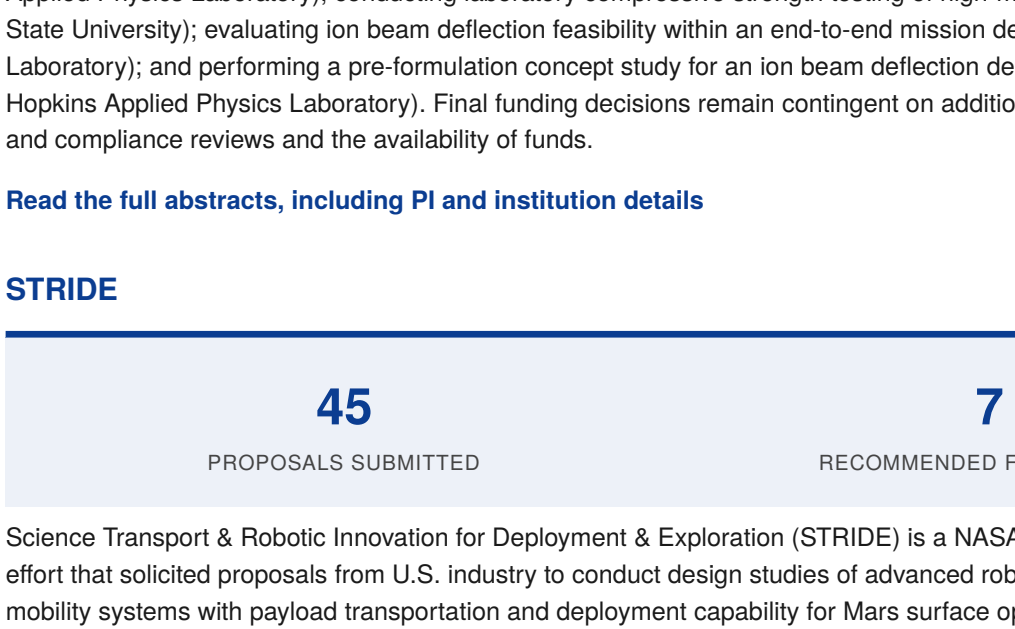
Number of submitted and proposals recommended for selection by year of PI's terminal degree for Cycles 1 and 2.

YORPD



Yearly Opportunities for Research in Planetary Defense (YORPD) is a planetary defense effort funded by the Near-Earth Object (NEO) Observations Program and administered by the Planetary Defense Coordination Office (PDCO) that solicited for proposals to conduct NEO surveys, astrometric follow-up, orbit determination, physical characterization, and impact hazard mitigation studies. YORPD is intended to accomplish strategic objectives based on Congressional taskings—specifically to discover and characterize 90% of NEOs greater than 140 meters in size—and to comprehensively inventory NEOs that may pose an impact threat or support NASA's exploration goals. The effort also seeks to characterize a representative sample of NEOs by measuring their sizes, shapes, and compositions, while advancing potential mitigation strategies through investigations spanning up to five years.

Proposals were submitted through a two-step program and evaluated across four panel topics: **Survey/Follow Up** (14 proposals, 28%), **Characterization** (21 proposals, 42%), **Mitigation** (10 proposals, 20%), and **Mission Concepts** (5 proposals, 10%). For the ROSES-2025 cycle, YORPD utilized a dual anonymous peer review (DAPR) process for the first time.



Proposed category breakdown across all 50 YORPD proposals: NEO Survey/Follow Up 14 (28%), Characterization 21 (42%), Mitigation 10 (20%), Mission Concepts 5 (10%).

[View the YORPD Solicitation on NSPIRES](#)

Fourteen Proposals Recommended for Funding

As of March 5, 2026, fourteen (14) of the 50 YORPD proposals were found eligible for further review prior to selection, spanning a wide range of planetary defense strategies: continuing the ATLAS NEO search program (University of Hawaii); expanding astrometric follow-up across three major ground-based facilities (University of Arizona); modernizing the Pan-STARRS detector plane (University of Hawaii); conducting NEO confirmation and characterization at Table Mountain Observatory (NASA Jet Propulsion Laboratory); characterizing X-complex near-Earth asteroids (University of Central Florida); resolving population completeness discrepancies between telescope and atmospheric bolide data (Southwest Research Institute); refining near-surface regolith radar estimates using synthetic-aperture techniques (Johns Hopkins Applied Physics Laboratory); enabling rapid visible and near-infrared spectral characterization of high-priority targets (Lowell Observatory); performing a near-infrared spectral survey using the NASA IRTF (Northern Arizona University); investigating lunar impact ejecta hazards to orbital operations (Southwest Research Institute); advancing NEO disruption modeling via nuclear explosive devices (Johns Hopkins Applied Physics Laboratory); conducting laboratory compressive strength testing of high-metal meteorites (Arizona State University); evaluating ion beam deflection feasibility within an end-to-end mission design (NASA Jet Propulsion Laboratory); and performing a pre-formulation concept study for an ion beam deflection demonstration (Johns Hopkins Applied Physics Laboratory). Final funding decisions remain contingent on additional programmatic, financial, and compliance reviews and the availability of funds.

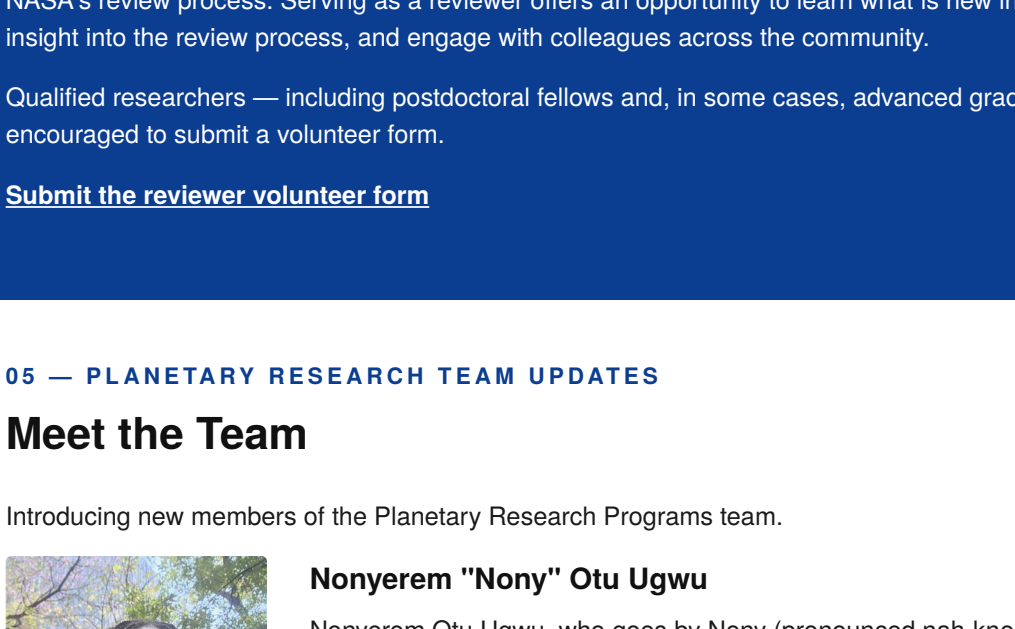
[Read the full abstracts, including PI and institution details](#)

STRIDE



Science Transport & Robotic Innovation for Deployment & Exploration (STRIDE) is a NASA Mars Exploration Program effort that solicited proposals from U.S. industry to conduct design studies of advanced robotic surface and aerial mobility systems with payload transportation and deployment capability for Mars surface operations and, where applicable, early-stage prototyping and demonstration of hardware for the same purpose. STRIDE is intended to identify the level of development required for commercial robotic mobility systems originally developed for terrestrial and lunar use to operate and traverse realistic Martian environments while enabling cost-effective transportation and deployment of science payloads. The effort also seeks to identify key capability gaps and help advance the broader landscape of robotic exploration at Mars.

Proposals were submitted under two tracks: **Track A – Concept Study** (8 proposals, 18%), focused on defining the mobility system architecture and modeling its anticipated performance in the Mars environment; and **Track B – Concept Study + Prototype & Demonstration** (37 proposals, 82%), which includes the same concept-study work as Track A plus development, testing, and demonstration of prototype hardware to validate key performance capabilities.



Proposed mobility category breakdown across all 45 STRIDE proposals: Wheeled 16 (36%), Hybrid wheel/leg 7 (16%), Hybrid aerial/surface 5 (11%), Rotorcraft 5 (11%), Novel 5 (11%), Fixed-wing 3 (7%), Legged 3 (7%), Tracked 1 (2%).

[View the STRIDE solicitation on NSPIRES](#)

Seven Proposals Recommended for Funding

As of June 24, 2026, seven (7) of the 45 STRIDE proposals were found eligible for further review prior to selection, spanning a wide range of mobility approaches: folding rotor blades for next-generation Mars helicopters (AeroVironment); a lunar-derived wheeled rover adapted for Mars operability (Astrobotic Technology); a flexible, teleoperated cargo-and-science rover built on a lunar heritage platform (Venturi Astrolab); a centipede-like nuclear rover using geometric-phase locomotion (Ground Control Robotics, with Honeybee Robotics); an affordable, nuclear-powered long-range rover designed to deploy other vehicles (Honeybee Robotics); an AI-augmented, autonomous Moon-to-Mars rover evolution (Intuitive Machines); and a spherical, omnidirectional rover architecture (Aegis Aerospace). Final funding decisions remain contingent on additional programmatic, financial, and compliance reviews and the availability of funds.

[Read the full abstracts, including PI and institution details](#)

04 — OPEN NOW

Opportunities

Planetary Science Enabling Facilities

The Planetary Science Enabling Facilities (PSEF) program supports access to facilities and equipment that enable planetary science research across the community. Information about the facilities supported by NASA's Planetary Science Division is available on the [PSEF webpage](#).

The PSEF solicitation is now available as part of ROSES-25 on NSPIRES. The program is intended to be competed every two calendar years, with a planned budget of \$10 million annually and approximately \$5 million anticipated for new selections. Proposals are due Nov. 10, 2026.

[View the PSEF solicitation on NSPIRES](#)

SCubed — New Cycle

An additional cycle has been added to SCubed and the due date is on or before 11/12/2026.

Volunteer to Be a Reviewer

Consider volunteering to serve as a reviewer and help expand the pool of subject matter experts available to support NASA's review process. Serving as a reviewer offers an opportunity to learn what is new in the field, gain first-hand insight into the review process, and engage with colleagues across the community.

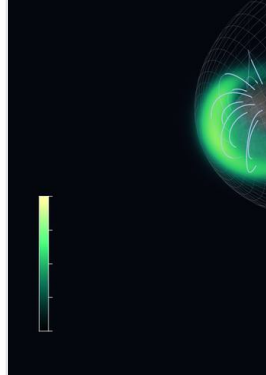
Qualified researchers — including postdoctoral fellows and, in some cases, advanced graduate students — are encouraged to submit a volunteer form.

[Submit the reviewer volunteer form](#)

05 — PLANETARY RESEARCH TEAM UPDATES

Meet the Team

Introducing new members of the Planetary Research Programs team.



Nonyerem "Nony" Otu Ugwu

Nonyerem Otu Ugwu, who goes by Nony (pronounced nah-nee), is from Houston, Texas. She joins the team through the 2024 Planetary Science Early Career Award Showcase, featuring talks from this year's selected investigators. Speakers will highlight projects spanning astromaterials, planetary defense, digital terrain models, expanding access to planetary science, and open-source tools for gamma ray and neutron spectroscopy. Each presenter will give a 15-minute talk followed by three minutes for questions.

[Join the showcase](#)

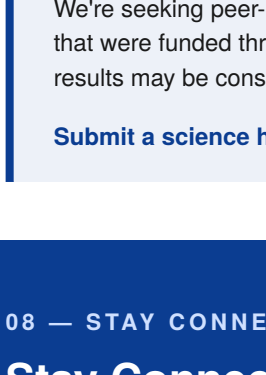


Charlie Carlone

Charlie Carlone is from Cleveland, Ohio. He joins NASA through the Techforce initiative as an Information Technology Specialist supporting the Planetary Research Programs at NASA Headquarters. In this role, he will focus on improving and updating legacy systems and other software infrastructure.

Charlie graduated from Case Western Reserve University with a bachelor's degree in Computer Science and previously worked on large-scale financial systems at Fidelity Investments, supporting systems that handled sensitive financial and investment data for millions of clients.

Fun fact: Charlie can be spotted, especially by his spiky hair, in a few scenes of a movie with Tom Holland.



Viva Miller

Viva Miller joins SMD's Planetary Science Division as a Portfolio Executive on detail from Goddard Space Flight Center. She most recently served as Deputy Program Manager in NASA Goddard's Engineering and Technology Directorate, overseeing the Ground Data Systems portfolio, and previously managed technology licensing and strategic partnerships in Goddard's Strategic Partnerships Office. Before NASA, she was a Primary Patent Examiner at the U.S. Patent and Trademark Office. Her NASA journey began in high school with a summer apprenticeship at Langley Research Center, and she holds degrees spanning computer science, engineering management, and law, including a J.D. and a patent attorney license.

Fun fact: Viva is a certified lifeguard.

06 — ON THE CALENDAR

Upcoming Activities

Sept. 16 — Planetary Science Early Career Award 2024 Showcase

Join us from 3–5 p.m. ET on Webex for the 2024 Planetary Science Early Career Award Showcase, featuring talks from this year's selected investigators. Speakers will highlight projects spanning astromaterials, planetary defense, digital terrain models, expanding access to planetary science, and open-source tools for gamma ray and neutron spectroscopy. Each presenter will give a 15-minute talk followed by three minutes for questions.

[Join the showcase](#)

Oct. 6–8 — Committee on Astrobiology and Planetary Sciences Autumn 2026 Meeting

The Committee on Astrobiology and Planetary Sciences will meet in person for a partially closed session.

[Find more information](#)

Coming Soon — 2025 Early Career Award Selections

Recommendations for five individuals to receive the Planetary Science Early Career Award have been completed. We look forward to sharing the final selections in an upcoming issue.

07 — FROM RECENTLY FUNDED WORK

Science Highlights

Recent results from projects supported by NASA Planetary Research Programs.

NASA's MESSENGER Reveals a Dynamic Electron Radiation Belt at Mercury

Researchers used NASA's MESSENGER data, new analysis methods, particle simulations, and theory to show that Mercury has a structured electron radiation belt. Radiation belts had been seen at other magnetized planets, but whether Mercury's small magnetosphere could hold one had been debated for more than 50 years.

The Earth days that Mercury's radiation belt can last for several hours finds when solar wind conditions are weak, but it can break down quickly when stronger solar wind forcing disrupts trapped electron paths. Radiation belts can threaten spacecraft, and Mercury offers a rare natural laboratory for studying extreme space weather in a compact magnetosphere. The findings make predictions that ESA/JAXA's BepiColombo mission may be able to test when it arrives in orbit.

Funding source: Exobiology — funded by Discovery Research Submitter and Principal Investigator: Weijie Sun

[Read the paper](#)

Earliest Evidence of Handedness in a 555-Million-Year-Old Fossil from Australia

Researchers conducted the first quantitative study of *Springina floundersi*, an Ediacaran fossil from Australia, to better understand how this early animal moved. The fossils show evidence of several coordinated movements, including bending, wave-like motion, and movement of repeated body units.

Many specimens bend in the same preferred direction, which the team interprets as the oldest described evidence of behavioral "handedness" in the fossil record. The work helps show that some of Earth's earliest animals had more complex movement and behavior than previously known, and points to major animal innovations before the Phanerozoic.

Funding source: Exobiology — funded by Planetary Research Submitter: Scott Evans - Principal Investigator: Mary Droser

[Read the paper](#)

Have newsworthy planetary science to share?

We're seeking peer-reviewed science results published within the last six months or recently accepted for publication that were funded through a NASA Planetary Science Division program, award, and/or mission activity. Eligible results may be considered for amplification across NASA communications channels.

[Submit a science highlight](#)

08 — STAY CONNECTED

Stay Connected

Newsletter Archive

Past and current issues are hosted on the Planetary Science Division website.

[View the archive](#)

Questions

For questions about a specific program, contact the relevant program officer.

[Program contacts](#)