First Articles in the Planetary Science Journal Now Available Online

The first articles to be published in The Planetary Science Journal are now online! Launched late last year by the American Astronomical Society (AAS) and its Division for Planetary Sciences (DPS), PSJ is an open-access journal devoted to recent developments, discoveries, and theories relevant to the investigation of both our solar system and other planetary systems. PSJ publishes manuscripts reporting significant new observational results, theoretical insights, computational modeling, laboratory experiments, innovations in instrumentation, and field work in the planetary sciences.

PSJ’s Editor is Faith Vilas (Planetary Science Institute). She is supported by three Science Editors:

- Brian Jackson (Boise State University),
- Edgard G. Rivera-Valentin (Lunar and Planetary Institute, Universities Space Research Association), and
- Maria Womack (University of Central Florida).

The first article to appear online is an editorial by Vilas, DPS Publications Subcommittee chair Ross Beyer, and AAS Editor in Chief Ethan Vishniac describing the motivation for launching the new journal and the services PSJ will provide to the scientific community. Next are six articles covering a wide range of objects from Mercury to Jupiter and an equally wide range of phenomena from formation of the lunar regolith to the interplanetary transfer of material from asteroids to Earth.

The first issue begins with 6 articles from analyzing Mercury’s iron core, modeling the lunar surface, and investigating the effects of a spacecraft impacting an asteroid, as well as several other developments, discoveries, and theories in planetary science.

The above URL will always take you to the main landing page for the journal, and show you the most recent articles. The ‘table of contents' for the first issue as it continues to accumulate, is here:


Editorial: Introducing The Planetary Science Journal

Faith Vilas, Ross A. Beyer, and Ethan Vishniac

https://doi.org/10.3847/PSJ/ab7e92 [3]
Modeling the Formation of the Lunar Upper Megaregolith Layer

James E. Richardson and Oleg Abramov


On the Delivery of DART-ejected Material from Asteroid (65803) Didymos to Earth

Paul Wiegert

https://doi.org/10.3847/PSJ/ab75bf [5]

The Rapid Imaging Planetary Spectrograph: Observations of Mercury's Sodium Exosphere in Twilight

Carl A. Schmidt, Jeffrey Baumgardner, Luke Moore, Thomas A. Bida, Ryan Swindle, and Patrick Lierle

https://doi.org/10.3847/PSJ/ab76c9 [6]

Asteroid Diameters and Albedos from NEOWISE Reactivation Mission Years 4 and 5


https://doi.org/10.3847/PSJ/ab7820 [7]

Jupiter-style Jet Stability

Timothy E. Dowling

https://doi.org/10.3847/PSJ/ab789d [8]

The Solar Wind Prevents Reaccretion of Debris after Mercury's Giant Impact

Christopher Spalding and Fred C. Adams

https://doi.org/10.3847/PSJ/ab781f [9]
is a "gold open access" journal, meaning all its articles are free for all to read as soon as they’re published. Like the other AAS journals, PSJ features a quick turnaround from receipt through review to online publication. Initially articles are being collected into quarterly issues; as the number of submissions increases, issues may be numbered bimonthly or more frequently.

"I’m really excited to witness the birth of The Planetary Science Journal," says AAS President Megan Donahue (Michigan State University). "I have no doubt that it will publish a lot of groundbreaking research. Even as AAS President I didn’t get a special preview, so I’m eager to go online and read the first articles."

To celebrate the launch, PSJ is offering a special discount of half off our regular gold-open-access rates for the first 100 articles published in the journal. Submit your manuscript early to enjoy all the benefits of open access without paying the full article publication charge!