

## THE ART OF PLANETARY SCIENCE 2020: PLANETARY SCIENCE & SCIENCE FICTION.

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**Introduction:** The Art of Planetary Science (TAPS) is a graduate student-run event at The University of Arizona's Lunar & Planetary Laboratory (LPL). Currently in its 7<sup>th</sup> year, TAPS continues to create linkages between science and art [1,2].

This public outreach event was started in 2013 by the graduate students of LPL and has continued to operate since [1,2]. The annual event typically runs in the fall semester of the academic school year with art submissions opening in the summer months. Each year, we have approximately 100 artists contributing over 200 pieces of planetary and space-themed art.

Artwork submitted to the show includes a vast range of mediums such as traditional paintings, jewelry and metal art, sculpture/glasswork, digital illustration, short films, astrophotography, and many more. There are two overarching categories that artists may submit pieces under: *Data Art* and *Fine Art*.

**Data Art:** This category reaches out to scientists and encourages them to create works of art from their very own research. We have found throughout the years of running this event that many scientists are also artists (**Figure 1, top**). Submissions have included pieces inspired by scientific data, models (both good and bad outputs), digital terrain models, and more. By scientists working with their data in an artistic outlet they create new ventures in thought and visualization, which is inherently needed within the realm of planetary science and space exploration. We hope to inspire scientists who attend the annual LPSC gathering to explore their research and data in a new way to create works of art that aid in showcasing their interesting and diverse scientific fields.

**Fine Art:** The larger, fine art category is quite broad and can speak to artists of all ages and all types of art media. Fine Art is considered to be art that has been inspired by any space or planetary components but is not

Exhibition Year	No. of Artists	No. of Submissions	No. of Public Attendees
2019	114	205	729
2018	96	198	268*
2017	107	210	676
2016	119	211	727
2014	95	178	550
2013	73	116	320

**Table 1:** The Art of Planetary Science by the numbers, showing the growth of the event over the years. \*Year 2018 data was only collected on 1/3 event dates.



**Figure 1:** From top to bottom, left to right: an example of Data Art by Dolores Hill; an example of Fine Art, by Chrysanthé Kapuranis; images of spectators, scientists, and artists from the 2019 show.

rooted in an exact data or model, for example (**Figure 1, 2<sup>nd</sup> row left**). Each year, Fine Art has the largest range of diverse media formats, and we receive submissions from around the world.

**Public Outreach Engagement:** TAPS was founded as an event to engage with the local southern Arizona community. The goal of our event is to show the public the beauty in science and space exploration without getting bogged down with jargon and lengthy presentations that are less accessible to the general public. Public attendance has grown each year (**Table 1**), emulating the fact that the general public in southern Arizona has a noticeable interest in space sciences.

Tucson, Arizona is a long-standing hotspot for space exploration and, in addition, hosts several space artists. We wish to continue the growth of this public outreach event and hope to inspire planetary scientists from institutions abroad to consider making some space-themed art from their scientific research and data, so that we may highlight the elegance and beauty of space exploration from beyond the bounds of LPL.

TAPS has also offered smaller satellite iterations at scientific conferences such as the Annual Meeting of the Division of Planetary Sciences (DPS) of the American Astronomical Society [1,2]. We have found that many of the scientists who create art gain an opportunity to show a different side of their research to their collaborators, as well as conference attendees being able to simply enjoy planetary and space-themed art while attended a large conference. We hope to partner with more conferences in the future in order to gain more visibility within the planetary science community.

**Upcoming Show, Fall 2020:** For the upcoming TAPS iteration, we will be enacting a theme for the first time within the exhibition. The theme for our 2020 show encapsulates the previous decades of space exploration, which have been highly influenced by science fiction (**Figure 2**). We hope to inspire artists to create science fiction-themed space art to be showcased in the 2020 show.

The 2020 show will coincide with NASA's "International Observe the Moon Night" (September 26<sup>th</sup>, 2020), and thus, we will also open up a Moon-themed art submission section in addition to our general submissions. Submitting Moon-themed art is also special nod to the Lunar & Planetary Laboratory as Kuiper's "Lunar Atlas" is a large proponent of putting Tucson into the Space Race Era, and ultimately leading to the establishment of the Lunar and Planetary Laboratory in the first place.

*Art Submissions for 2020:* The submissions for artists will be open June 15 – August 15, 2020 (**Figure 2**). All submissions are hosted through the event website ([lpl.arizona.edu/art/2020](http://lpl.arizona.edu/art/2020)). Submissions need not be Sci-

Fi or Moon-themed, i.e. any space or planetary or Earth-themed art submissions will be considered.

**Additional Information:** Please connect with us if you are interested in collaborating or starting your own "satellite" type of planetary and space-themed art show. We are on Twitter at [@artofptys](https://twitter.com/artofptys), on Instagram at [artofptys](https://www.instagram.com/artofptys), on Facebook as [The Art of Planetary Science](https://www.facebook.com/TheArtofPlanetaryScience). Find more information at any of the above social media, or on our website at [lpl.arizona.edu/art](http://lpl.arizona.edu/art). Please email any questions to the lead author, or to [art@lpl.arizona.edu](mailto:art@lpl.arizona.edu).

**References:** [1] Molaro, J.L., and J.T. Keane (2014) LPSC Abstracts, The Art of Planetary Science: An Exhibition – Bringing Together the Art and Science Communities to Engage the Public. [2] Molaro, J.L., J.T. Keane, S. Peacock, E. Schaefer, and H. Tanquary (2014) DPS Annual Meeting, The Art of Planetary Science: An Exhibition – Bringing Together The Art and Science Communities To Engage The Public.

Calling all Space Artists!  
The 7th Annual Showcase will feature space-themed art from all mediums and artists of all levels.

THE UNIVERSITY OF ARIZONA  
COLLEGE OF SCIENCE  
**LPL**  
Lunar & Planetary Laboratory

THE  
**ART**  
OF  
PLANETARY  
SCIENCE  
& SCIENCE FICTION  
FALL 2020

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**Figure 2:** The call to artists for *The Art of Planetary Science 2020: Planetary Science & Science Fiction*.