

THE ART OF PLANETARY SCIENCE: AN EXHIBITION – BRINGING TOGETHER THE ART AND SCIENCE COMMUNITIES TO ENGAGE THE PUBLIC. J. L. Molaro, J. T. Keane. University of Arizona (jmolaro@lpl.arizona.edu).

Introduction: On December 4, 2013, the University of Arizona’s Lunar and Planetary Laboratory (LPL) presented The Art of Planetary Science: An Exhibition (TAPS). This was a one night art exhibition and competition displaying works of art inspired by planetary science, alongside works created from scientific data. The goal of the event was to build community between the local art and science communities of Tucson, and to engage the public together in celebration of the beauty and elegance of the universe.

Part of the purpose of the event was to present a different side of science to the public. The public often sees science as dull, boring, and clinical. In reality, however, science is full of beauty and elegance, and the practice of creating scientific knowledge requires an enormous amount of creativity. The event provided scientists the opportunity to show this to the public, by creating art out of science and their scientific data. These works utilized, for example, equations, simulations, visual representations of spacecraft data and a scientific concepts, and images of extra-terrestrial rock and dust samples. Viewing these works of art alongside more traditional artwork inspired by those same scientific ideas provided the audience with

a more complex, multifaceted view of the content that would not be possible viewing either alone.

Event Organization: The event was organized over the course of four months, beginning with a call to artists and scientists in the community. This was accomplished by posting the call to artists in online calendars and local newspapers, and sending it to email listserves used by local artists. Fliers were posted in local establishments including art stores, bookstores, coffee shops, art galleries, and museums. The event was also heavily promoted to the University, with calls to artists/scientists sent out to all science and art departments, and fliers posted in those buildings. A Facebook page for the event was also set up for attendees and artists to share with others, and to post updates from the organizers. Similar methods were used later to reach out to the community to attend the event.

A website for the event was set up with an online submission form for any interested artist or scientist to submit work, for free, for consideration. LPL was able to accommodate accepting all artwork that was submitted. Once physically received, the TAPS team arranged and hung the art throughout the LPL building using display boards and easels owned by LPL and borrowed from other departments. This was done over the course of a week and a half.

Team Structure. The event was conceptualized and organized by two LPL Ph.D. candidates as a voluntary EPO project, and was successful with the help of a staff member from LPL’s Space Imaging Center, and the volunteer support of other LPL graduate students. Going forward, the team will adapt as graduate students enter and graduate from LPL. Input and advice from participating artists and scientists, as well as event attendees, was collected from evaluations during and after the event, and will be utilized to improve future events.

Target Audience. Both the science and art communities are vibrant, active, and thriving in Tucson. However, events in both communities tend to appeal to specific or limited audiences. For example, the majority of public outreach done in planetary sciences is target towards engaging K-12 children. While this is vital to encouraging interest in STEM fields in the long term, it is adults who have the more immediate, short-term control over how the sciences are viewed in today’s society, and the public policy that provides funding and research opportunities to

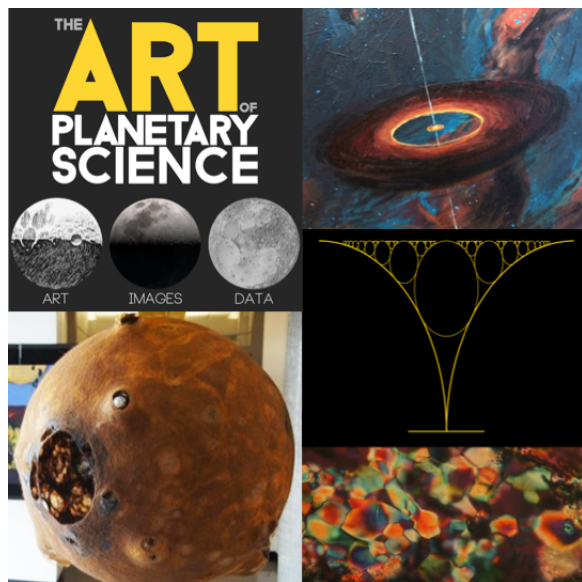


Figure 1. (top left) Event logo, by James Keane, (bottom left) untitled felted orb, Monica Durazo, (top right) Protoplanetary Disk, James Keane, (middle right) Champagne Glass, Renu Malhotra, (bottom right) Chelyabinsk meteorite thin section, Dolores Hill.

scientists. This event was specifically designed to reach out to adults in the community and raise awareness about the value and importance of planetary science and astronomy to society. Additionally, the event was designed to reach out to the art community, a group of people that is often less aware of or interested in the sciences.

The overall reach of this project is fairly limited geographically, but had a very large impact on the local community. Knowledge of the event did reach beyond Tucson, with many participating artists submitting works from other states in the southwest, and even a couple from outside the US. While this was not our goal, we were pleased to have reached a wide audience who was enthusiastic about the exhibition.

Full Community Engagement. One powerful aspect of an event like this exhibition is the ability to reach out to many sectors of the community. Prizes for the competition were sourced from local businesses such as art and bookstores, as well as from private donors. This allowed these businesses and the contributing artists to actually participate in and collaborate with LPL in public engagement, which broadened the reach of the event beyond traditional attendance.

Artist and Scientist Participation: Artists and scientists of all types and levels participated in the exhibition. The TAPS team specifically emphasized this during promotion, trying to make the event as inclusive as possible. Having a wide range of ability represented in the art, from professional to amateur, emphasized the community values, collaboration, and engagement that was central to the goals of the exhibition. Works were submitted by prominent local artists with galleries, art students, scientists and science students, amateur astronomers, and art hobbyists. A wide range of mediums was also represented, including paintings, drawings, photographs, digital images, film, poetry, sculpture, textiles, and glasswork.

Event Reception: The inaugural exhibition in December 2013 was a successful event, displaying over 150 works of art, from more than 70 artists and scientists, and drawing an audience of more than 300 art and science enthusiasts. The response from the art community was overwhelmingly positive. Many artists expressed their enthusiasm for exploring planetary science and astronomy as a theme, getting the chance to interact with and meet scientists, and having an additional venue (and audience) in which to display their work. The scientists who participated were equally as interested in seeing local art, meeting artists, and promoting the beauty of science.

Overall, the majority of artists, scientists, and attendees surveyed during and after the event rated their enjoyment of the exhibition very highly, and



Figure 2. (left) *The Big Bang*, Paula Rice, (top right) *Transcendent*, Miwa Block, (bottom right) *Rainclouds*, Juan Lora.

indicated they believed that it added depth to both the science and art communities, and a significant opportunity for collaboration and education.

TAPS Partnerships: The TAPS team was able to collaborate with a local art museum, the Tucson Museum of Art, and a local brewers organization, Craft Tucson, for this event. Craft Tucson and the Tucson Museum of Art (TMA) organized an event called Art on Tap: Art, Music, and Beer Fest, which took place on December 7th, three days after the Art of Planetary Science exhibition. It was arranged for the winners of the TAPS competition, as well as a dozen additional selected works, to be displayed at Art on Tap. This provided LPL and the TMA an opportunity to work together in engaging the public in art and science through cross promotion, and provided participating artists more than one opportunity to display their work. This was an extremely successful collaboration, which both LPL and the TMA wish to continue for future events.

Future Development: The success of the first ever Art of Planetary Science exhibition in Tucson has paved the way for future art and science collaboration and engagement. The TAPS team and LPL hope to make this an annual event. Many improvements on the organization and promotion process for next year are already being discussed. The TAPS team also hopes to collaborate more with other science departments, local art and science organizations, as well as reach out to the University of Arizona College of Science for additional support.

There are also plans to facilitate smaller, longer-term art shows in local galleries, coffee shops, and museums with a subset of the artwork displayed at TAPS. This will broaden the overall reach of the event, and allow for engagement beyond the walls of LPL.