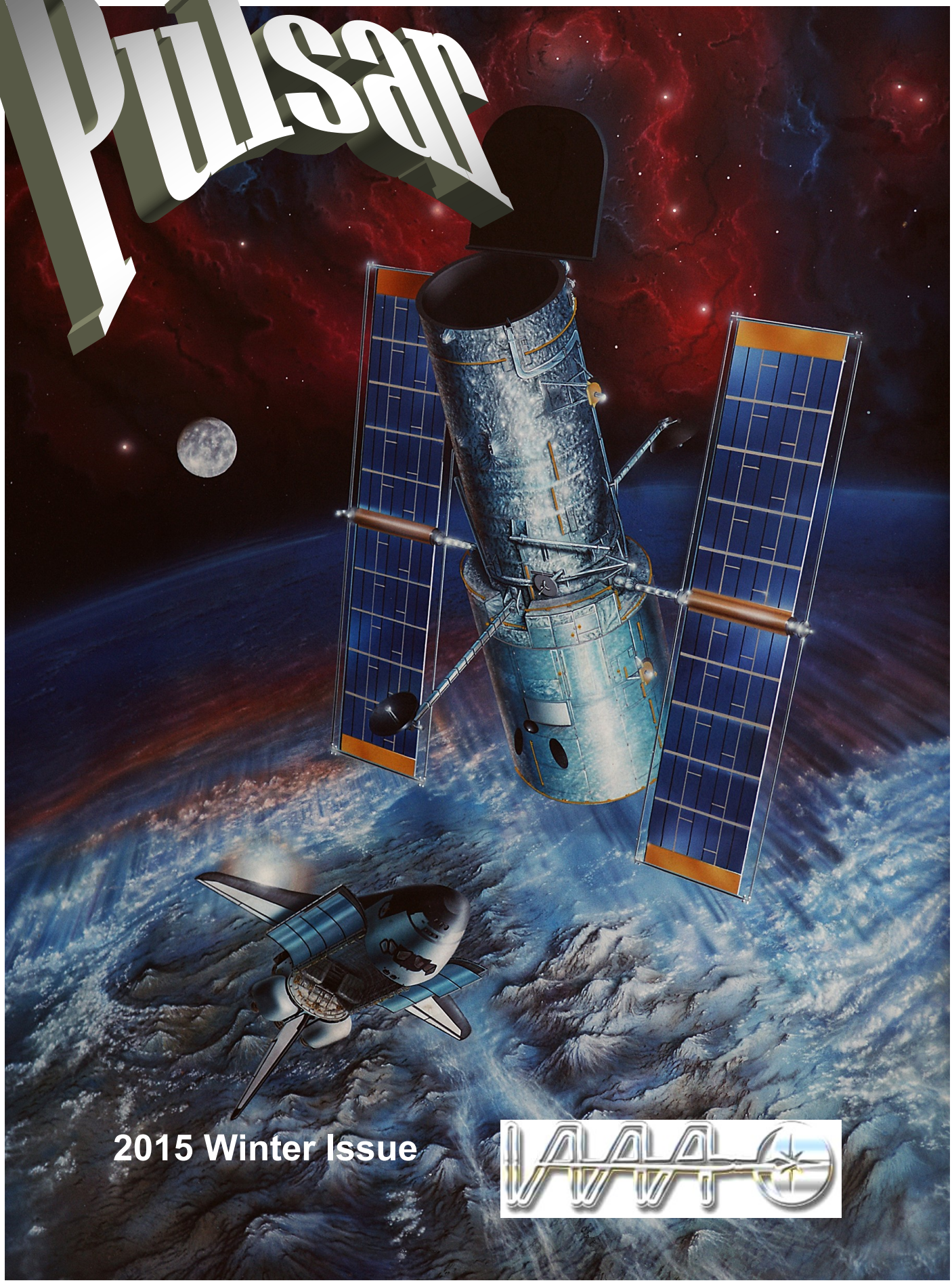
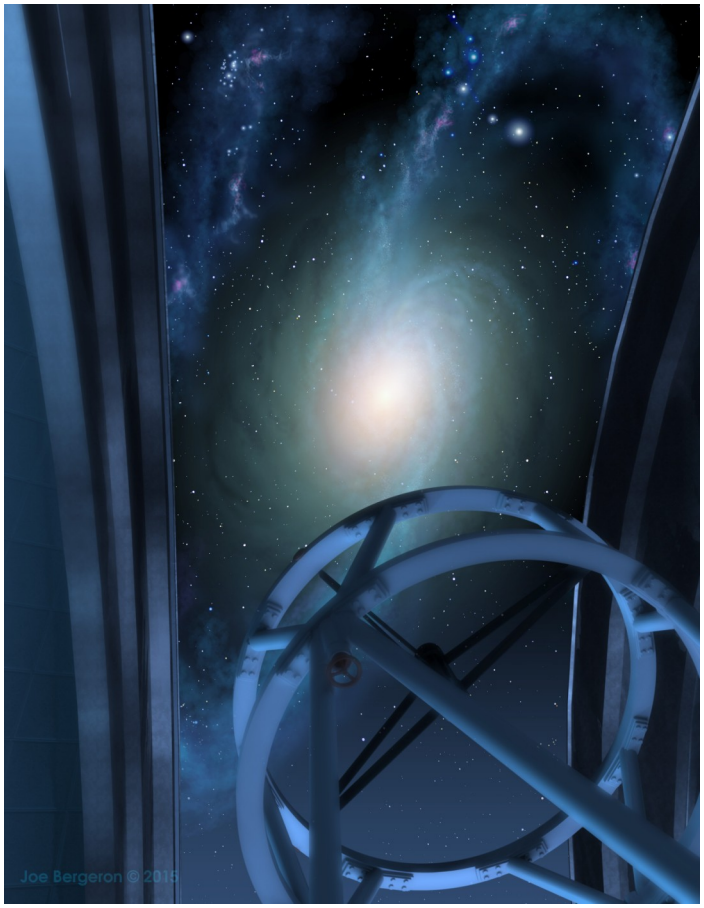
Pulsar



2015 Winter Issue



Two images of telescopes , digital, by **Joe Bergeron**

Lovell Telescope, digital, Nick Stevens

From the Editor

Greetings. As I write this, I am filled with all kinds of emotions regarding our space art association and its importance. First, we are growing by leaps and bounds and the outreach that our members are doing collectively is astonishing. From the new chapters being formed to multiple books published by our members and exhibitions in the Biodome, the support we give each other for our art is unsurpassed.

Second, I am also hit with a sadness as I write about our members who have gone. I can't remember a time since I have been a member that we lost this many in a six month period of time. I am filled with pride, though, as I see how all of you share on the listserve your memories of these members, so they are not forgotten and are introduced to new members who did not get to know them. You all do them a great honor. Please see our very full memorium page.

Last, as I am hanging artwork in my first representing gallery, I am struck by the fact that all of us are moving forward, with all of our contributions, great and small. Keep up the great work, IAAA!

Erika McGinnis, Pulsar Editor, Pulsar-editor@iaaa.org

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Cover art: Hubble Space Telescope, Rick Sternbach. Science Digest, Astronomy, and Sky & Telescope all featured this painting of the HST done as a collaboration between myself and Don Dixon. Extensive use of airbrush and acrylics, a similar rendering style, and detailed CAD drawings from Lockheed Sunnyvale allowed us to produce this orbital view a few years before Hubble was launched.

Ancient History

Back before there was an IAAA, the Planetary Society put together what was billed as the "first international space art show" to coincide with Planetfest '81 and the Voyager 2 encounter of Saturn. We relied on Jon Lomberg's master list of artists from Carl Sagan's Cosmos series as well as my art contacts through Astronomy Magazine and Sky & Telescope to collect pieces for the show. One evening, a small subset of the artists got together and discussed, for the first time, forming an international group representing artists whose main goal was the scientifically accurate portrayal of space subjects. This photo is part of that group. The following summer, Bill Hartmann invited several artists to Hawaii for what would become the model for future IAAA field workshops. A year after that, in Death Valley, IAAA was officially born!

- Back row: Joel Hagen, Don Davis, Bill Hartmann and Don Dixon
- Center row: Marilynn Flynn, Pam Lee, Anne Norcia, Ernie Norcia
- Front row: Kim Poor, Michael Carroll, and a talented artist/photographer Geoff Chandler.

-Michael Carroll

Kudos for members of IAAA

- **Dan Durda** was on The Science Channel on March 3rd, talking
> about exoplanets in Alien Planet Earths.

- Also, he had an article on Astronomers Without Borders. astronomerswithoutborders.org/component/content/article/191-news/1553-dan-durda-astroartist-of-the-month-october-2014.html

- **David A. Hardy** appeared in his second and third blogs on Astronomers Without Borders. Here are the links:

astronomerswithoutborders.org/blog/astroart-blog/item/my-life-in-the-iaaa.html
astronomerswithoutborders.org/blog/astroart-blog/item/space-art-paint-or-pixels.html

- He also had another article up by a German journalist on her blog: motherboard.vice.com/read/our-dreams-of-space-are-fueled-by-the-art-of-david-hardy

- **Simon Kregar** had a write up on the Artfire website: artfire.com/nosh/the-skys-the-limit-painting-with-simon-kregar/

- **Richard Bizley** had three works published in a book called Heteromorphs, by Wolfgang Grulke. www.heteromorph.com/home

- And had an ancient and extinct arachnid named after him! www.foss-rec.net/18/37/2015/fr-18-37-2015.html

Welcome New Members!

Chris Weeks is a 2 and 3D artist, illustrator, modeler, animator, and much more. You can see his website here: chrisweeks3d.com/

James Keane shared this with the listserve: I'm a third year planetary science PhD candidate at the University of Arizona, Department of Planetary Science and Lunar and Planetary Laboratory (LPL). I work primarily on theoretical studies associated with planetary satellites and asteroids. When I'm not working on my research, I enjoy dabbling in art (most recently, focusing into space art). My media of choice vary, but my mainstays are pen and pencil, acrylic painting, and digital media. You can find some of my artwork on my persistently out-of-date website <http://jamestuttlekeane.blogspot.com/>. While I am a planetary scientist first, I always strive to incorporate art and design ethics in my scientific work. I take pride in in having visually compelling figures and graphics to help explain my sometimes abstract theoretical work.

Chad Glass was born December 10th, 1969, in Sacramento, California, Chad Glass showed early signs of a talent for drawing. Born into a life of television, Chad's art director father, Chris Glass, took him along on the weekends to the art department where learning and exploration were encouraged. From ages 3, 4, 5, 6 and beyond, while moving from California, to Massachusetts, to Georgia, then back to California, a life in broadcasting influenced and shaped the way Chad approached his art, cultivating a sense of visual storytelling.

"Everything I've learned about storytelling I've learned from television storyboarding. Moreover, drawing has been the bridge across every gap in my life," says Chad. "Since there are only 7 basic stories that anyone could ever tell, it doesn't matter where one learns to tell these stories as the structures are all the same whether you watch them on t.v. or read them in a book." Continuing to draw well into adulthood, it only made sense he would need to keep doing it to survive: "I am not really capable of doing anything else in life except for being an artist. This is both an amazing gift and a worldly burden. Even though I write and play music, too, these are within the arts."

In 1999 he moved to Los Angeles from Georgia and established a career as a storyboard artist in Hollywood. He continues to draw but today focuses more on returning to painting and serving beauty instead of "industry." He lives in Sylmar with his wife and cat.

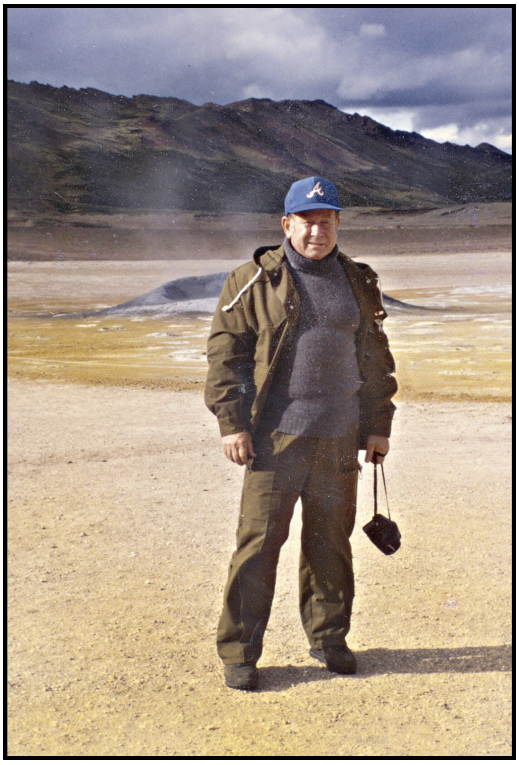
Bloodmoon, Chad Glass

Mixed media: graphite on paper, scanned into Photoshop and color corrected.

MY FIRST IAAA WORKSHOP

By David A. Hardy, FIAAA

Reading Richard Bizley's excellent article in the Summer issue on his visit to Reunion Island reminded me vividly of my very first IAAA workshop, and of one event in particular: the long and arduous walk and climb, the revelation when our goal was reached. . . This was in 1988, and it was the first truly *international* workshop, as it was attended by about a dozen western artists, and a similar number of what were then Soviet artists – including cosmonaut Alexei Leonov. Most of the western contingent was of course American, but there was one Canadian – Kara Szathmary – and one Brit. Kara became President, and I became the first Vice President for Europe; and we have remained firm friends ever since.



Alexie Leonov

I had been to Iceland before, in 1981 with two friends. We hired a 4x4 and camping equipment, and simply stopped wherever there was a piece of flat ground, drinking and washing in the local river or under a waterfall; the water was always clear and pure. And cold. So I knew how magical this island is, and was glad of the chance to return. On both of these trips we stuck mostly to the better known areas: the fault valley or graben of Thingvellir, the thermal areas of Geysir and Namaskard, and so on. But on the workshop there were of course always lots of people swarming over the landscape, sketching, painting and photographing, and I know that Richard will agree when I say that it's always good if you can get away by yourself for a while and just drink in the 'otherworldliness' of it all, undisturbed.

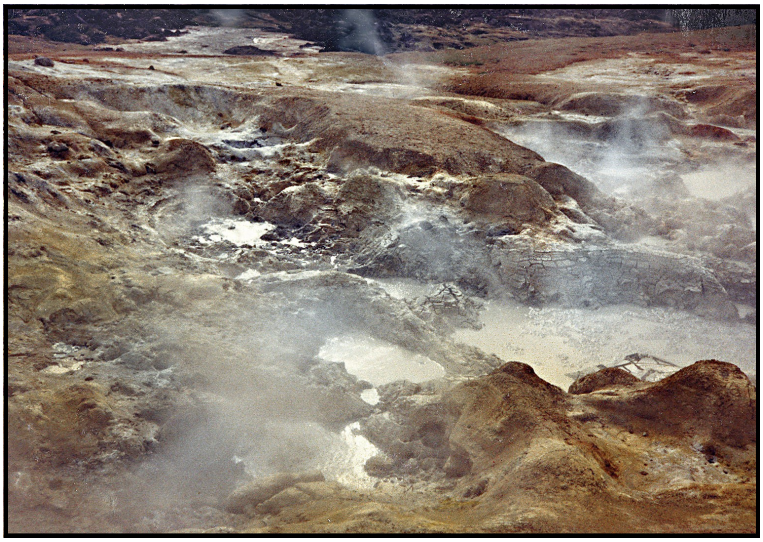
We drove in a coach (nicknamed 'the Phobus' – the Russians had a probe on its way to Mars) across the centre of the island to its north, to the area around Lake Myvatn (trans. 'midge', though we weren't troubled by them). Our hotel was only a few miles from Mt. Krafla, but Elsa, our Icelandic guide, told us that the lava chamber underneath it had risen by half a meter in the last two weeks, and if it rises by a meter there is likely to be an eruption. So although we were free to do it unaccompanied, she was not allowed to take us up it. One of our US members (who sadly left us shortly afterwards) was Mark Hamel unaccompanied, she was not allowed to take us up it. One of our US members (who sadly left us shortly afterwards) was Mark Hamel – no connection with Luke Skywalker! – and we looked at each other and said "Yeah – let's do it!", on our 'free day'. There were no other takers.

Researching it later, I found that the area had originally appeared in 1727, and that it started out as a lava fountain which spouted molten material for two years before subsiding. After a minor burp in 1746, it settled down into the grotesque sight that we were seeing. But we knew that there had been fissure eruptions as recently as 1977 and 1984, known as the 'Krafla Fires'. The words of Elsa came back to me, and I could

Dave at Krafla

It was indeed a long walk, and we left the road at what looked like an accessible route up the volcano, and began clambering over increasingly jagged and jumbled rocks, always heading upwards. It wasn't a 'climb' as such, of course; we didn't need ropes or crampons! But it was still pretty strenuous, and we were very aware of the fact that if either of us even twisted an ankle, there was no help around (and no mobile phones in those days of course). . . But eventually we made it, and looked down from the rim into the crater. Talk about alien! Plane after plane of huge, menacing grey boulders, shrouded in mist and swirling steam, receding into the blue distance. A splash of color – yellow, orange – in one direction, and we made for it. The place became even more weird and otherworldly as we discovered an area of tortured mud, with steaming pools, hissing vents and bubbling, sulphur-encrusted mudpots. This was the thermal area, or 'solfatara' of Leirhnjukur, hidden inside the crater of Mt. Krafla; and we were the only humans for miles around. It's probably the closest I have ever felt to being on another planet.

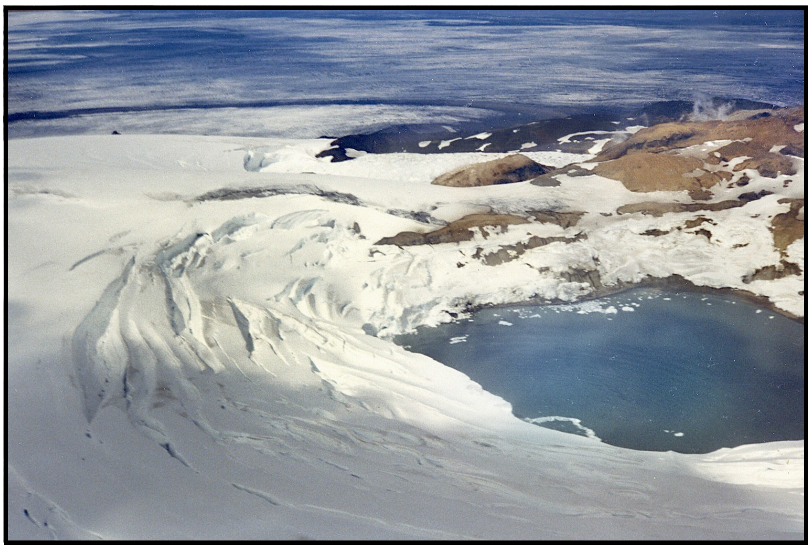
Before we left the Myvatn area we were offered the chance of a flight in a Cessna light aircraft, over the Vatnajokull Glacier. Again, only two of us took up this chance, my companion this time being Dennis Davidson (who also later became President, as did I). And again, I am glad that I did so, as Iceland from the air is possibly even more spectacular than it is from the ground. We saw volcanoes that erupted, steaming, from beneath the ice, some forming blue lakes; flew over an area of pseudo craters (formed when lava flows over water), and others where interlacing networks of streams flowed from beneath the ice. I also saw the tabletop volcano of Mt. Herdubreid (pron. roughly 'heatherbread'), a tabletop volcano formed under an ice-sheet, hence its flat top. On our return to the little airport I was greeted as I stepped down by Alexei Leonov, holding a roll of paper to simulate a microphone: "Your journey – it was dangerous?"



It is sad that our proposal for the *National Geographic* expedition was not accepted, but I would urge any members who can manage it to make every effort to attend any future workshop in this fantastic island. You won't regret it!

(More of David A. Hardy's photos and a video link continued next page)

Leirhnjukur,



Vatnajokul

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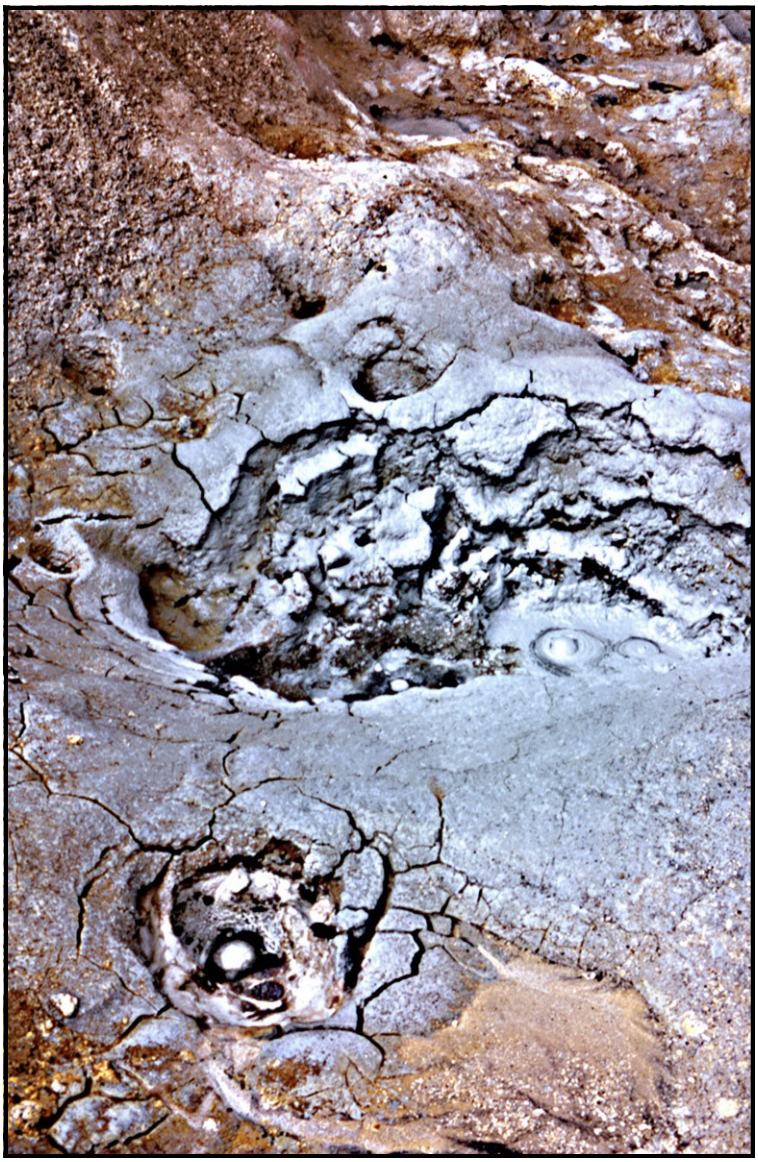
You can see here a short video of the creation of a scene on Mars, based on a pastel sketch made at Thingvellir by Dave during this workshop: https://www.youtube.com/watch?v=OB3rKnPj_ts

Hardy and Leonov



2014 IAAA SOUTHWEST REGIONAL WORKSHOP

Michelle Rouch and I, Simon Kregar, hosted the 1st Southwest Regional IAAA Workshop in Tucson, Arizona on November 10th thru the 14th. The workshop was held during the same time as the Division of Planetary Sciences (DPS) conference in order to allow attendees to participate in both. The aim of this workshop was to bring together artists of the IAAA and provide an opportunity that combined the best elements of the traditional workshops with access to the DPS conference, various tours, and educational talks from the artists. The end of the workshop culminated in a world class art show highlighting the all the artists' works, which was in celebration of the United Nations International Year of Light.

Attendees were William K. Hartmann, Aldo Spadoni, Rick Sternbach, Julie Jones, Pam Lee, Marilynn Flynn, Jim Scotti, Matthew Stricker, Theresa Hentz, Michael Carroll, Earl Billick, Reid Silvern, Michelle Rouch, and myself, Simon Kregar.

MONDAY ARRIVAL | NOVEMBER 10th

The workshop started with a thunderous boom as the attendees all joined to have dinner and libations at the Thunder Canyon Brewery. It is amazing the synergy that happens when you get 15+ astronomical artists in the same place at the same time. The evening progressed with a viewing of the movie "Interstellar". Of course the after movie discussions abounded with a room full of planetary scientists and artists, how could it not? One of the best comments overheard was, "Why does it always have to devolve into a fist fight"?

2014 IAAA Southwest Regional Workshop

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Michael Carroll, Marilynn Flynn, and Pamela Lee looking

TUESDAY | NOVEMBER 11th

This was our Classroom day hosted by the City of Tucson's Ward 6 building. Orange food being a tradition, was plentiful and Earl even found some fantastic orange cheese cracker rocket ships.

Rick Sternbach gave a wonderful talk on our craft as it stands now with a retrospective on Space Art. Michelle Rouch dazzled all of us and made us up our game as she talked about professionalism in our field…with handouts! Reid Silvern gave us a fascinating look at his coined technique, Coulminair, which uses light and the effects of the spectrum on canvas to give the illusion of movement.

Alas, my Science of art lecture will have to wait for another workshop due to timing constraints and attendees very eager to get to the Pima Air and Space Museum.

Reid Silvern demonstrating his Coulminair technique.

Initially we had scheduled a tour of the Biosphere 2 but a mutiny staged and off we went to the Pima Air and Space Museum. The local group is no stranger to the PASM as we have been doing art shows and public outreach there for a while. With limited time, the boys ran from plane to plane with glee emulating

14 year olds at a sci-fi convention. If you are not familiar with the Pima Air and Space Museum, it's the largest private collection of aircraft in the world.

Rick, Jim,

Simon, and Earl discussing the finer points of aviation.

WEDNESDAY | NOVEMBER 12th

Because the Division of Planetary Sciences allowed artists to attend for a very affordable fee, we were allowed full access to their lectures, poster session and the convention. We had known for a while that ESA's lander Philae was scheduled to land on comet 67P/Churyumov–Gerasimenko this morning so we were all up early racing to find a place where we could watch the live ESA feed. Fortunately, the DPS conference set aside a banquet room with a live webcast from ESA and we staked our claim over several tables. The tension was palatable in the air, giving way to elation and cheers as we shared in the drama that unfolded that morning with the planetary scientists. It was pure electricity as confirmation of the landing and bounce came in. As the cheer subsided, William K. Hartmann peeked in the door and asked "Is it time for Plein Air"?

Waiting for the landing with Marilynn, Michael. Simon, and Rick

On our way to the Plien Air time, we arranged to make a surprise visit to Kim Poor and Novaspace Galleries. Kim was blown away by the group of Astronomical Artists coming to visit him and we were delighted to spend a few minutes with one of the founders and the first President of our organization.

Next up, the desert. Despite the harsh and unyielding terrain, the group was determined to learn all they could about the landscape. Dr. Hartmann was gracious enough to take us to a site that was used by scientists at the local Lunar and Planetary Laboratory in the sixties to determine if the red patina on the rocks was chemically the same as the red rocks on Mars. Then we settled a bit further down the road for a brief, but fantastic, Plien Air session of drawing, painting, and photography. traditionally done. Earl Billick, a new member of the IAAA, graciously offered his home for the "Invasion of the Artists!" Margaritas, beer, and pizza were served as we all gathered for viewing of Galaxy Quest. By Grabthar's hammer, this was an amazing evening!

Pamela inspecting Bills latest creation ,

Marilynn focused on the landscape

The first rule of Space Art Club is that we don't talk about Space Art club. pictured-Aldo and Theresa

THURSDAY | NOVEMBER 13th

Thursday was the day for most of the attendees to get a chance to stretch their legs and attend the many lectures going on at DPS. More discussions took place as the big questions of the night were asked. Where are we headed with our craft? What is the future of astronomical art? There were many opinions and many possibilities. We also discussed starting a monthly online workshop and the possibility of rebranding the name "Space Art" to give it weight in the arts community. In addition, there were talks of collaborative works such as a book titled, "The Art of Exoplanets". Also, we threw around the idea of how to rework the IAAA artist category definition to include Astrophotographers and other forms of nontraditional art, or possibly even creating a whole new category.

Rick relaxing at Starr Pass.

As the day ended, fantastic discussions where had at dinner and then we made our way to Sky Bar where we were the guests of honor. Sky Bar being an astronomy themed bar, beamed images of all of our work on huge screens…provided by Sean Parker, a local astrophotographer and space art advocate, which was pretty awesome.

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FRIDAY | NOVEMBER 14th

THE ART OF SPACE AND LIGHT SHOW

At the Sky Bar

The workshop culminated on Friday with a fantastic art show showcasing over 110 individual art works and representing 22 IAAA artists from around the world. The City of Tucson graciously donated space at their Ward 6 building in order to accommodate the show.

Setting up an art show is challenging enough, but setting up a show with 22 artists can test even the most experienced curator. Michelle Rouch was our taskmaster for the day, keeping us all focused on what we had to do. Theresa Hentz was flying from wall to wall with Aldo Spadoni using her incredible eye to hang all of the work. Rick Sternbach was cutting out art description cards and folding brochures.

Our local group has exploded over the past several months. Not all of them could attend the workshop, but all were represented by their works. Dinah Jasensky, Adam and Miwa Block, and Mark Prustin joined us

for the art show. In addition, we had some works by Corrine Cowain and the famous Arizonan chalk artist, Holly Schineller, who donated her time by creating a beautiful sidewalk chalk art piece leading people into the venue. Pulling it all together was Matthew Stricker who generously donated his time and talents to cater the opening with a magnificent spread of Hors d'oeuvres.

The doors opened and as people started to trickle in, we knew that this was something special. Jon Raimer was also able to make an appearance and introduced the show though video. Michelle Rouche and her belly dancing troupe entertained us with several dance numbers. I unveiled my newest work, “Across the Universe, Dr. Carolyn Porco” that I created in conjunction with Dr. Porco.

The show ran through the end of December, and was met with rave reviews across the community.

This was a collaborative effort, Earl Billick , Matthew Sticker, Theresa Hentz, helped tremendously not to mention all of the attendees! A huge shout out goes to Christina White who donated her time and talent to design and implement all to the graphics, signage, logos, and website for this show and workshop. Special thanks goes to the talented and fantastic Michelle Rouch who co-hosted this workshop, thank you for setting the bar so high…and keep on dancing.

It is my hope that people walked away from this feeling reenergized, and with the recognition that the art we do is more important and relevant now than ever.

Also seeing the smile on Kim Poors face was worth it all.

Thanks for the memories! Photos and more stories can be seen at: www.iaaa.org , www.facebook.com/IAAATucson, www.iaaatucson.org

Photographs courtesy Aldo Spadoni, Jim Scotti, Simon Kregar and Julie Jones. Article written by Simon Kregar and Christina White

The Art of Space and Light

Tucson, AZ, November 14, 2014 - The International Association of Astronomical Artists (IAAA) in conjunction with the United Nation’s International Year of Light proudly presented “The Art of Space and Light” Gala, hosted by Tucson City Council Member, Steve Kozachik at Ward 6 in Tucson, AZ. The art exhibition was open on November 14, 2014 to the public and continued until December 28, 2014. http://spaceandlightart.com/

IAAA Artists

The Art of Space and Light was a kick-off celebration of the International Year of Light in Tucson, AZ for the local community to aim awareness of the achievements of light science and its applications, as well as its importance to humankind. The international year of light continues through 2015. The Art of Space and Light exhibition enhanced the community by bridging the sciences and the arts. It offered a venue by combining two professional backgrounds and leveraging the creativity of the artists to integrate the sciences through unique one-of-a-kind pieces.

The workshop culminated on Friday with a fantastic art show with over 110 individual pieces of art and representing 22 IAAA artists from around the world. The City of Tucson graciously donated the space at their Ward 6 building in order to accommodate the show. The show was attended well with over 150 visitors on the opening alone and ran through the end of December 2014.

IAAA President, Jon Ramer sent a letter to US Ambassador, Samantha Power, as well as to John Dudley, Steering Committee Chair, International Year of Light and Light-based Technologies 2015 of IAAA efforts in recognition of the U.N. resolution in promoting education about space through art.

The voice of Jon Ramer, IAAA President in a short video clip was shared with the guests during the grand opening, introducing the IAAA and the exhibition with an appeal that space art is the genre of the future and that humanity's destiny lies in space.

IAAA members and prospective new members, who participated were: IAAA Board of Trustees, Aldo Spadoni; Founders & Fellow Artist Members: Michael Carroll, Marilynn Flynn, Dr. Bill Hartmann, Pamela Lee, Kim Poor, and Rick Sternbach, and Artist Members and aspiring new members: Earl Billick, Adam Block, Miwa Block, Corinne Cowan, Theresa Hentz, Tai Hicks, Dinah Jasensky, Julie Jones, PhD Candidate, James Keane, Simon Kregar, Sean Parker, Mark Prusten, Michelle Rouch, Jim Scotti, Reid Silvern, Matthew Stricker, and Lucy West-Binnall. In addition chalk artists, Holly Schineller donated her time to capture the International Year of Light logo as the guests were welcomed.

Special thanks to Christina White for her vision and hard work in making the group look professional, as well as Matthew Stricker whose catering provided top notch Hors d'oeuvres for our guests. Special thanks to Steve Kozachik and his staff members for their support, and also Dr. Tim Swindle from UofA LPL. We want to recognize especially PhD Candidate Ms Jamie Molaro for creating the awareness of a large presence of Astronomical Art interest with 2 consecutive years of the “The Art of Planetary Science Exhibition.” In 2013 she and her team had coordinated with over 70 artists and scientists across Arizona and in the following year over 150 participants. Dr. Swindle shared, “We had about 1000 people in attendance this year (up from 300 last year), and I was delighted just to have the number of people who came to our building who wouldn't have even heard about us otherwise.” The Arts connect people.

Simon Kregar unveiled his art nouveau, inspired work, “Across the Universe Dr, Carolyn Porco.” Mr Kregar was inspired to do this work after meeting Dr Porco and had the opportunity to develop this work in conjunction with her.

The IAAA is a nonprofit organization whose members implement and participate in astronomical and space art projects, promote education about space art and foster international cooperation in artistic work inspired by the exploration of the Universe.

Creating the 2014 Hugo Award
By Joy Alyssa Day

BJ Johnson and I were very honored to have been selected to create the base for the 2014 Hugo Awards, presented at Loncon3, the World Science Fiction Convention held in August 2014 in London. Since the convention was based in London in 2014 (it moves each year), we designed the base to include one of the iconic London buildings, nicknamed “The Gherkin”.

And putting The Gherkin and the Hugo Rocket on the moon!

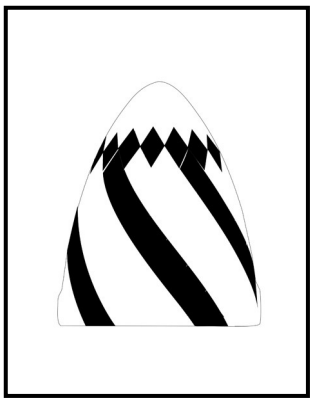
As I worked on the bases, I had great fun teasing my Facebook friends with images that showed the progress, but showed absolutely nothing of the actual base. The Hugo Awards have a very strict policy that the bases remain completely secret until they are unveiled at the convention itself and awards ceremony.

For the initial design, BJ created a 3d model of the base and the overall design. The base, the backdrop, even the attachment engineering were included so that when it came time to build each one, we would know the exact measurements to cut the glass or make the molds. There would be no guesswork or fiddling around to get the pieces to line up and connect with each other. This saves us a ton of headaches when the deadline is fast approaching. We used 3d printing technology to print the base model first out of plastic. This provided a positive for me to create the heat resistant negative mold to cast the base in glass.

I had BJ make it bright purple, because why not?? The first photo shows using the purple 3D print pressing down onto the mold material to make a negative. The second photo shows the right-side up purple 3D print positive, the kiln material negative (with the big finger sticking up) and the resulting cast glass piece made from the kiln material negative. The big finger was to make sure there was a hole through the cast glass base for the bolt that holds the Hugo Rocket in place. The sculpture base is a solid cast glass oval; approximately 2" x 6" x 4"

The base was cast upside down, so that the resulting top of the casting would be rough and cratered. The 3D printed mold included those craters, as well as an outline of the Hugo Rocket so that it would snugly fit down into the moon to help hold it in place. The mold is filled with a layer of white & gray glass to form the lunar regolith, then clear glass cullet is added to form the clear portion of the base. The amount of glass was precisely weighed so that each base would be pretty much the exact same weight and height.

The first image shows the glass cullet filled molds ready to be fired up to 1600 degrees. The second photo shows the hot kiln at about 1200 degrees. The glass fires up and then has to slowly cool so it doesn’t crack. The whole process takes about two full days. Then it’s a matter of breaking the glass away from the mold and cleaning it up. Sometimes, the mold was able to be re-used, but usually the process destroyed the mold and I had to make a new mold for each award base. There were 46 bases made.
The building section is created with layers of glass, colored, carved and then fused together and is about 4.25 inches wide by 7 inches tall. The glass pieces were painted with glass powder to make the different stripes of the Gherkin building. Once fused together and cooled down, then each piece was fired again to form the curve that would wrap behind the rocket and attach to the back of the “moon”.



I used a printed pattern to paint on the stripes, and used sandblasting to make the thin white lines.
Once the pieces were finished, a 3D printed bushing was added to the hole in the base for the bolt to got through. The awards were packaged up and shipped to England where they were revealed in a wonderful display, complete with Queen's Guard (or at least costumed persons that looked like it).
The sculptures were well received and loved by their recipients, which is one of the best parts of making artwork. Here is the 2014 Hugo Award:

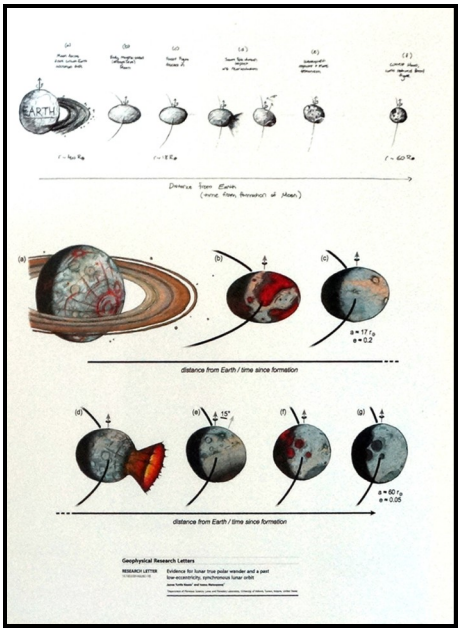
The Renaissance Era of Astronomical Art

By Michelle Rouch

The Renaissance of Astronomical Art has descended on Tucson, Arizona. The University of Arizona, Department of Planetary Science and Lunar & Planetary Laboratory (LPL) created a movement with their 2nd Annual Art and Planetary Science Exhibition. Tucson, known as the Astronomy Capital of the World, offered the best setting to host this event. There were over 200 pieces of artwork from 90 artists and scientists across Arizona and beyond. Timothy Swindle, Department Head and Jamie Molaro, PhD Candidate with dedicated organizers transformed the LPL Building into an Art Museum.

James Keane, PhD Candidate showcased "The Origin of the Lunar Figure" received First Place in Data Category. His cartoon illustrations offered a representation formation of the Moon's tidal and rotational fossil figures, as well as reorientation of the Moon due to the formation of the South Pole-Aitken impact basin.

ASAA sister affiliate, International Association of Astronomical Artists (IAAA) that participated in the exhibition were Dr. William Hartmann, Don Davis, Simon Kregar, Marilynn Flynn, Michelle Rouch, James Keane, Matthew Stricker, Reid Silvern, Sean Parker, and Pamela Lee. The newest Tucson members of IAAA, who were influence by resounding scientific and artistic displays, were Dinah Jasensky, Theresa Hentz, and Earl Billick. In a short three month period the IAAA membership in Tucson had grown from 5 to 13.



The Art of Planetary Science Exhibition

In November a Regional Southwest IAAA Workshop with 20 members will be held alongside with the 46th Meeting of Division of Planetary Science, exhibiting artwork at Starr Pass Marriott Resort. Tucson City Council will host a Gala, titled "The Art of Space and Light." The event will celebrate the International Year of Light, an observance by the United Nations to aim awareness of the achievements of light science and its applications, and its importance to humankind.

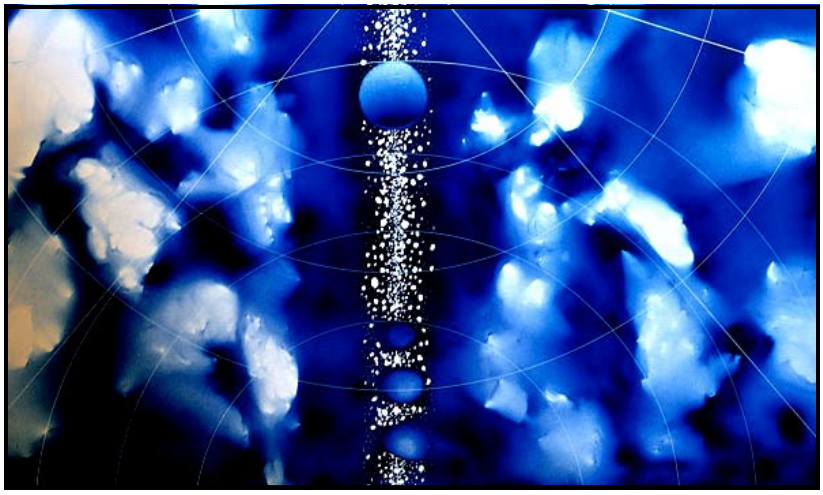
The Origin of the Lunar Figure by James Tuttle Keane, IAAA Artist

Tucson IAAA Artist (L-R): Sean Parker, James Keane, Matthew Stricker, Simon Kregar, Marilynn Flynn, Reid Silvern, and Michelle Rouch

Photographer Credits: Univ. of AZ, Dept. of Science)

In Memorium

Italo Rodomonti,



the most significant representative of Space Art in Italy, has built during his long artistic career a coherent and formally unexceptionable way around a passion and an adventure: the representation of the cosmic space and its declination founded an the artistic culture of contemporaneity. It has already been said that Space Art moves on a very dangerous ridge, often uncertain between figuration and illustration. Keeping on this ridge in a balance which is not only intellectual whim or, even worse, cunning contamination has been the constant challenge with which Rodomonti has always competed reaching unitary and artistically valid results without giving up his basic love: the infinite space of the universe.

Roy Scarfo

born in 1926 in Carnegie, Pa., joined the Marine Corps at age 17, served in the South Pacific, and was wounded on Okinawa. He then served in the American Embassy in Peking, China, studying art and the Chinese language.

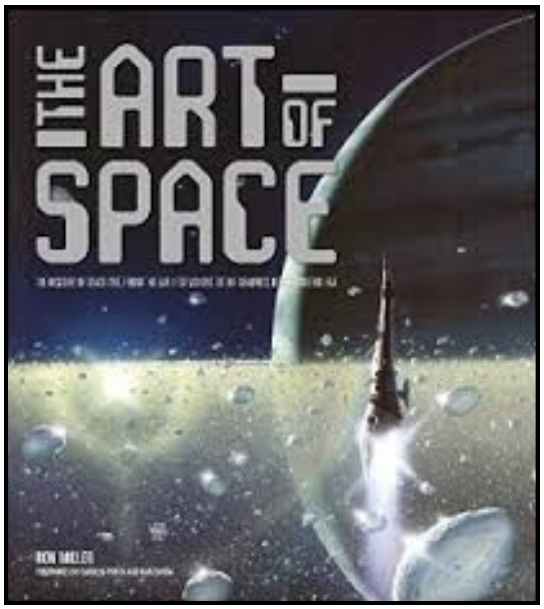
After his honorable discharge in 1946, Mr. Scarfo continued his studies at the Art Institute of Pittsburgh, the Advertising Art Studio in Pittsburgh, and Carnegie Institute of Technology.

While most of his work was done before 1980, its visionary nature continues to be influential, his family said. As recently as 2002, his illustrations of space colonies were featured in International Design magazine and lauded for helping "stretch, challenge, and redefine our ideas about what a city can be." He was a fellow and trustee of the International Association of Astronomical Artists.

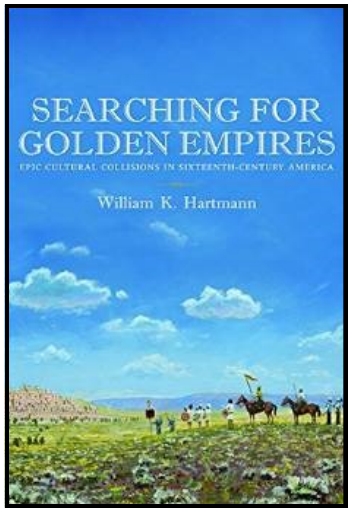
Arthur Gilbert

On 20th February 2015 the IAAA lost another artist: long-time UK member Arthur Gilbert, who was 78. Although not well known to many members (mainly due to the fact that he had limited internet access and did not take part in our listserve), Arthur attended a number of workshops, including the Crimea, Pasadena/ JPL (Voyager at Neptune) and several UK ones, and had work several exhibitions. Those who did meet him have fond memories of his modest and friendly demeanour and his quiet wit. He painted only traditionally, but his art was admired for its accuracy, detail and imaginative scenes. Hopefully we can include some examples in a future Pulsar.
David A. Hardy

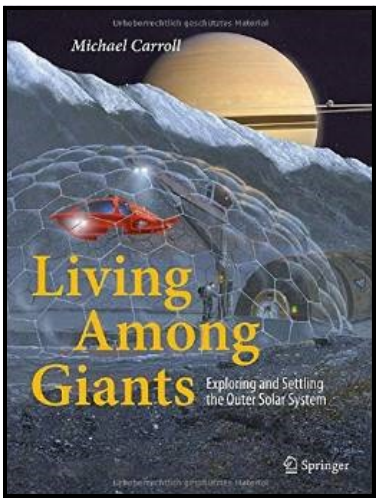
Books!



Ron Miller's The Art of Space The most comprehensive celebration of space art ever to be published, profiling the development of space-based art in a variety of media. In *The Art of Space*, award-winning artist and best-selling author **Ron Miller** presents over 350 high-quality and often photorealistic images that chart how artists throughout history, working with the knowledge and research available during their time, have endeavored to construct realistic images of visions throughout the universe. Beginning with depictions of space ships, unmanned probes, and space stations, Miller moves through collections that also illustrate the planets, moons, galaxies, and stars; cities, colonies, and space habitats; and possible alien life. The artwork presented here has been created in a variety of media, from the woodcuts and oil paintings of the Victorian and Edwardian eras to the digitally enhanced work of contemporary artists. Each chapter also includes two special features: one profile of an artist or group of artists of particular influence and one sidebar discussion of general cultural topics, such as the use of space art for propaganda purposes during the Cold War or the impact of the digital revolution on the resources available to artists. A fascinating study on the intersection of science and the artistic imagination, *The Art of Space* shows how astronomy and space travel has been reflected in popular art and public perception over the past two centuries. With forewords from Carolyn Porco and Dan Durda, this book is the ultimate resource for space art fans.



William K. Hartmann's Searching for Golden Empires This lively book re counts the explorations of the first generations of Spanish conquistadors and their Native allies. Author William K. Hartmann brings readers along as the explorers probe from Cuba to the Aztec capital of Mexico City, and then northward through the borderlands to New Mexico, the Grand Canyon, southern California, and as far as Kansas. Characters include Hernan Cortés, the conqueror; the Aztec ruler Motezuma; Francisco Vázquez de Coronado, a famous expedition leader; fray Marcos de Niza, an explorer-priest doomed to disgrace; and Viceroy Antonio Mendoza, the king's representative who tried to keep the explorers under control.



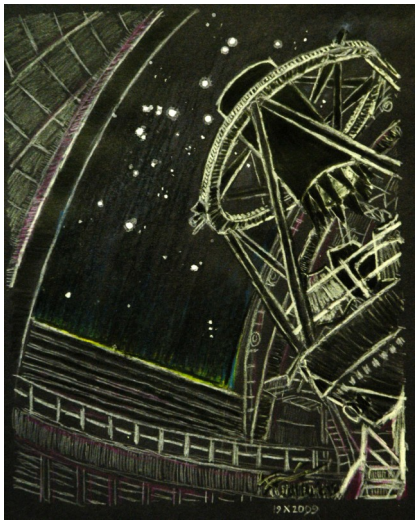
Michael Carrolls' Living Among Giants The outer Solar System is rich in resources and may be the best region in which to search for life beyond Earth. In fact, it may ultimately be the best place for Earthlings to set up permanent abodes. This book surveys the feasibility of that prospect, covering the fascinating history of exploration that kicks off our adventure into the outer Solar System.

Although other books provide surveys of the outer planets, Carroll approaches it from the perspective of potential future human exploration, exploitation and settlement, using insights from today's leading scientists in the field. These experts take us to targets such as the moons Titan, Triton, Enceladus, Iapetus and Europa, and within the atmospheres of the gas and ice giants. In these pages you will experience the thrill of discovery awaiting those who journey through the giant worlds and their moons.

Pretty Dawn, digital, Nick Stevens

Night, Michelle Rouch

Four Amigos, Michells Rouch



View of the Kitt Peak 2.1m Telescope Northwest Slope.

Inside Dome View of the Mayall 4m Telescope

The Mayall 4 Meter Telescope, Kitt Peak

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A note from our President

Hi Gang,

Well, it's 2015 and things are looking great. If you have not visited the IAAA website recently, take a few minutes to do so and visit the Archive. Lots of IAAA info there! We had a fantastic workshop in Tucson in late 2014 and are planning another one in the Great Northwest for 2015. Look for more details in this issue. Plan ahead, save up and join in the fun there! Astronomically speaking, 2015 is looking to be a really interesting year. New Horizons will pass by Pluto in July, Rosetta will make it's closest approach to the Sun in summer, and Dawn will make orbit around Ceres in March, all of which will undoubtedly send a flood of amazing imagery back to eager artists like us on Earth. Lots of inspiration coming our way folks and we need to pass it on to the greater public, so we are always looking for potential art exhibitions for the modular shows. If you know any possible venues in your area, please feel free to contact them yourself and let me know! Okay, that's enough blathering from me, enjoy this issue of the Pulsar - especially the Tucson workshop report!

Jon

McMath at Days End by April Faires

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