

First Light Lite

April 3, 2022

Jim Lynch – Editor

Message from the CCAS President

It is now officially Spring, when a world that has lain dormant ‘springs’ back to life. With Covid on a strong local downswing (at least for now), CCAS also plans to spring back into action, with our traditional live interaction events on the near horizon! Let me relate some details.

Lecture series

Zoom, even if we are a bit tired of it, has treated us well, and we will continue to employ it as a good tool to invite remote speakers to give some future talks to our club. This will be the case on April 7th (this Thursday), when Dr. Hugh Crowl from Bennington College will be giving us a talk on modern galaxies (see details below). His talk also will be recorded, as we are planning to post our talks on our website in the future.

Come May, our modus operandi will change back to live talks, hopefully with a live Zoom and recorded component as well. (We’re working on the latter.) I will give the talk that month on two topics, one being on astronomy and the other on our plans going forward. It will be at the Falmouth Public Library, and we will resume our traditional pre-talk club dinner before it a restaurant TBA. The speaker aside, this will be a welcome resumption of some pre-Covid normality.

In June, we hope to be back to our previous home in the Dennis-Yarmouth HS Library, and also have a Zoom and recording capability. Our pre-talk dinners would be at the Hearth and Kettle restaurant.

Also, we will continue our happy collaboration with the Phoenix Astronomical Society (PAS), which has invited us to their Zoom talks (also on the first Thursday of the month), and has been invited to ours. (You will find Zoom links/invitations in this newsletter to this month’s talks for both clubs.)

Star Parties (updated)

As we've just signed a one-year extension of the existing contract between the Cape Cod Astronomical Foundation (CCAF, our non-profit organization legal component) and the Dennis-Yarmouth Regional School District (DYRSD), in order to allow time for long-term negotiations, we also will have use of the Werner Schmidt Observatory (WSO) this coming year, and so will be planning star parties there in the not-too-distant future. We are still talking about safety rules, but once we have that detail ironed out, the weather is starting to become more agreeable, and we're as eager as anyone to be back outside and doing a little observing! Again, stay tuned!

School Projects and Activities

With our contract extension in place, we are planning to talk to the DYHS teachers soon about projects with their students for next fall. The same goes for other schools that we have interacted with. This spring semester is already well underway, so that next fall looks like the best bet.

Public Outreach

We have some very exciting plans coming together with the Camp Edwards base folks, the Upper Cape Cod Regional Technical School (and its adult education component), and the Cape Cod National Seashore. The first two are planned for springtime and summer, and the latter likely in September. We will keep you informed as these programs solidify and more detail becomes available.

Day of Astronomy

We are still planning a Day of Astronomy event at the Werner Schmidt Observatory (WSO) for the public and our club members and friends. However, it will be best to wait for the warmer weather. May 7th is a national "Astronomy Day," and *perhaps* that will be our choice. (Or perhaps not – it depends on a few other details falling into place...) We will send out notices (email and other) when the date for this solidifies, as well as post it on our web calendar.

Though there are a lot of activities that we can envision for this day, one that I'm hoping for is that we can invite our Zoom speakers over the past two years for a lunch/dinner with us in person, as a way of thanking them for keeping CCAS active and viable during Covid. They have been extraordinarily generous with their time and efforts, and this would be one small way we could say thanks (as well as talk with some very interesting folks!)

Speakers

Last Month's Speaker

March 3rd, 2022

Mr. Stephen LaFlamme, CCAS

Abstract: New to our club, but not new to astronomy, Stephen LaFlamme presented highlights from his 44 years of dancing with the stars. From that department store telescope on Christmas morning, to the high school career choice, to the backyard observatory, to the amateur 'discovery', to advanced astrophotography, to the projects of today. Join in for a casual presentation with a look at some quirky and unusual astronomy highlights.

Biography:

- longtime resident of Bridgewater, Mass.
- retired pharmacist, 32 years at Walgreens (B.S. Pharmacy @ U.R.I. '87)
- discovered amateur astronomy in 1978, at age 14
- not into science fiction, AT ALL
- countless Astro-presentations at schools, senior centers, libraries, civic groups, (and breweries!) over the years
- active on Facebook and Instagram at "**Universefromthebackyard**"
- my 'other' hobby craze is baseball history and memorabilia

Precis:

Stephen LaFlamme's abstract and bio tell a lot of his talk's tale, but also omit a lot of interesting detail.

Stephen's interest was initially piqued by seeing Venus in crescent phase through binoculars. This sparked a desire for a better instrument, a telescope. At age 14, like many of us older hobbyists, Stephen started with a 0.965" eyepiece "toy" telescope, Stephen exploited it to the max, making detailed drawings of the many night sky objects that even such a simple scope can reveal. (Think of what

Galileo did with a far lesser instrument!) His love of astronomy earned him the high school nickname “Astro-geek” that he still embraces, and his ambition was to turn his avocation into a career. However, his father wanted him to follow his track into pharmacy, and given that jobs in astronomy were very scarce at that time, Stephen went along with that wish and became a pharmacist, a career he pursued for 32 years. But, his passion for astronomy did not abate, and so he followed the route of a devoted amateur astronomer. Like all amateurs, Stephen “followed the technology,” going from large “light bucket” scopes to somewhat smaller, wider field scopes as time went on. He also built his own home observatory (below), and given this stable base of operations, became deeply attracted to astrophotography. During his talk, Stephen showed some of the most impressive examples of sky photography that we have seen. If you are interested in seeing this great collection, look on the Facebook and Instagram sites he has noted above. He also noted that anyone who would like to see his observatory is welcome to visit (with advance notice, of course!)



Fig. 1. Stephen’s home observatory! Check it out, along with some beautiful Astro-photos, on Stephen’s Facebook and Instagram sites (noted above).

Perhaps one thing that Stephen needs to do for his “bucket list,” however, is to take his impressive photography skills and some gear to the Southern Hemisphere, which he mentioned he has not yet had the chance to visit. What he could do with astrophotography staring at the heart of the Milky Way would be something to see! Also, we still have to convince him that there is some science fiction that is well worth reading!

This Month’s Speaker

April 7th, 2022

Dr. Hugh H. Crowl, Bennington College

Biography: Hugh Crowl is an astronomer interested in the evolution of galaxies, particularly in the local universe. He received his undergraduate degree from Wesleyan University and his PhD from Yale University. He is a member of the faculty in Physics & Astronomy at Bennington College.

Title: How Do Galaxies Lose Their Gas? Galaxy Transformation in the Virgo Cluster

Abstract: Galaxy morphology -- the appearance and shape of galaxies -- changes as the universe evolves. Star formation in galaxies peaked nearly 10 billion years ago and has declined since that time. In galaxies like our own Milky Way, star formation continues at a more or less constant rate to this day. However, in the nearby Virgo Cluster, we see evidence that star formation rate and, therefore, galaxy morphology, is profoundly affected by the dense cluster environment. I will show examples of galaxies currently being stripped of their star-forming gas in the Virgo cluster, discuss how we can use the remaining stars to understand their history, and describe what we think these events mean for the future of galaxies in the Virgo Cluster.

Additional note: Hugh also sent the following in an email, and I strongly urge you to check out the link he sent!

“Indeed; that JWST image is amazing. One of my friends from grad school posted an animation to Twitter showing the transition between a Spitzer image to the JWST image of that field; it's truly jaw-dropping... <https://twitter.com/gbrammer/status/1504369779540480002> “

ZOOM Link for this month's CCAS talk

Topic: CCAS April 7th Zoom Meeting Time: Apr 7, 2022 07:00 PM Eastern Time
(US and Canada)

Join Zoom Meeting

<https://us06web.zoom.us/j/83117625850?pwd=WThMYW84UVNaLytpMG1RQUhpQk80UT09>

Meeting ID: 831 1762 5850

Passcode: 503650

One tap mobile

+16465588656,,83117625850#,,, *503650# US (New York)

+13017158592,,83117625850#,,, *503650# US (Washington DC)

Dial by your location

+1 646 558 8656 US (New York)

+1 301 715 8592 US (Washington DC)

+1 312 626 6799 US (Chicago)

+1 720 707 2699 US (Denver)

+1 253 215 8782 US (Tacoma)

+1 346 248 7799 US (Houston)

Meeting ID: 831 1762 5850

Passcode: 503650

Find your local number: <https://us06web.zoom.us/u/kb225eqZ9t>

Phoenix Astronomical Society Speaker for April 7th

We again have an invitation to listen in to the PAS speaker for April 7th (same night as ours, but 7:30 PM in Arizona is 10:30 PM eastern!) Here is the link, an abstract, and a bio!

Phoenix Astronomical Society Meeting

Thursday April 7, 2022 (starts at 1030 PM Eastern)

Guest Speaker Michael J. Mackowski

Presentation: "Creating a Space-Faring Civilization – An Introduction to the National Space Society"

The National Space Society (NSS) is a space advocacy organization dedicated to the creation of a spacefaring civilization. Their vision is to use the vast resources of space for the benefit of humanity. While the concept of “space settlement” may seem like science fiction, industrialists like Elon Musk (SpaceX) and Jeff Bezos (Blue Origin) consider the establishment of human settlements off the Earth as part of their business plan and essential to the survival of the human race. This ambitious vision can be accomplished one small step at a time, and NSS has established a set of milestones needed to make progress towards this goal. There are local chapters all over the world, including here in Phoenix, Arizona.

Michael J. Mackowski retired from his position as an electrical systems engineer at Orbital ATK (now Northrop Grumman) in October 2018, after over forty years in the spacecraft design and development field. He has worked on such programs as Landsat 8, the Fermi and Swift gamma ray observatories, the Iridium communications satellite constellation, several NASA science satellites, and the Space Shuttle.

Mike is a long time NSS member and was co-founder of the NSS chapter in St. Louis Space Frontier in the early 1980s. He has been involved in the Phoenix NSS chapter since 2000. He is the former president of the Phoenix chapters of both the National Space Society and the Phoenix Section of the American Institute of Aeronautics and Astronautics (AIAA). Mr. Mackowski also is an Associate Fellow of AIAA, a member of the AIAA History Committee, a fellow of the British Interplanetary Society, a member of the International Plastic Modelers Society, and a member of the International Association of Astronomical Artists.

The Zoom login starts at 7:00 PM PDT (10:00 PM EDT). The meeting starts at 7:30 PM. (10:30 PM EDT) with a few remarks and introduction by President, Stuart Brackney. The Zoom meeting link is in the calendar entry

for Thursday April 7, 2022 on the PAS website, PASAZ.ORG or click on this link:

<https://us02web.zoom.us/j/86308465940?pwd=S3ZlNkRmQmRlU2lpZEV5MzNrUzZRYkNmZz09>

The presentation will last about an hour including questions and answers.

Paul Facuna , Vice President, Phoenix Astronomical Society

May 5th Speaker
Dr. Jim Lynch, CCAS

In May, we will “go live” again, and in order to welcome our members and friends back, CCAS will host a dinner at a local Falmouth restaurant TBA, followed by an astronomy talk and a discussion led by CCAS President Jim Lynch at the Falmouth Public Library. The talk will be based on Dr. Katie Mack’s acclaimed popular book, “The End of Everything (Astrophysically Speaking)” which is a cheerful and informative (really!) look at how the Universe might end. Though we couldn’t get Katie for an in-person talk, we think that we might do this topic some justice – and we also will be giving free copies of the book away to any students who might attend the talk (in line with what we did over the past two years.) We also will offer the choice to students of some of the other wonderful books that our speakers over the past two years have written, all of which are great reads.

The discussion component of the meeting will center on our plans for the post-Covid era (which hopefully is not forty years in the future, as opposed to what “South Park” has hypothesized). We will try to see if we can offer a Zoom link as well as the live talk, which is what we are looking to as our new model.

We hope we can see you either at dinner or at the talk or both. It will be very nice to get back to some personal contact!