First Light Lite

Dec 4, 2023

Jim Lynch – Editor

Message from the CCAS President

Autumn is now strongly with us, and the weather is semi-cold, hovering in the 30-50 degree F range. Time for warm clothes! Our November star party, slated for the window of 13-18 November, did indeed happen, with a good turnout. However, gloriously clear skies during the day turned into heavy mist and then fog as the evening progressed, and so we felt lucky to get the event in on the 16th.

One rather distressing note was that, despite heroic efforts by our Observatory Director Charlie Burke and several helpers from the club, the main scope didn't work, and has problems that will take some further efforts to cure. In the meantime, we had our binocular tour and small scopes outside, and an excellent slide show on astrophotography given by Hank and Mary Lou Ricci and featuring many of their photos. So, we have the basics for our WSO star parties still intact, but really miss our big scope, which can show some spectacular sky pictures in minutes when up and running.

This April 8th will feature a full Solar eclipse visible in the USA, and we are hoping that some of our members will have the opportunity to go either just north of here, or towards the Southwest to see the event. We will also have an event at CCAS for those of us who can't travel off Cape.

Our work with the DYHS students has now been resumed after a long break due to Covid, and several projects are underway. We also have one project starting with Falmouth Academy, and so we feel good about having our student programs active again!

The main dome telescope automation project is well into its initial planning stages, money is available, and a suite of equipment has already been identified. However, the complication of the system is making us think hard and look before we leap, so stay tuned for further developments.

Our monthly speaker program also goes well, with one of our own members, Dr. Frank Isik, describing the latest happenings in large telescope technology for last month's talk, which was held live and on Zoom and well attended. Jim Lynch and (hopefully) his Falmouth Academy science fair student will be giving this month's lecture, as will be described below. It will be on Zoom only and held an hour earlier at 6:30 PM. We are currently looking for 2024 speakers.

Three last items, repeated from the last two months: 1) for those contacting us on the web or by email, please give us a day or two to respond. Our mail is checked roughly every other day, and also on the days of star parties. We are still somewhat personnel limited! 2) for those asking for special star parties, please know that we can sometimes handle large group requests, but not always. We generally ask smaller groups to come to our regular star parties, where we are used to dealing with groups as well as individuals. 3) we are offering some used gear we have acquired (some in mint condition) on our website and via email to our members and friends. We can also loan this gear out to members if they are interested. There is a separate attachment with pictures and descriptions.

Dues

During Covid, we did not require dues, and left them to be entirely voluntary at \$30 per family. This year, as we are resuming activities, we are requesting dues at a reduced flat rate of \$15 per family (or individual, if there is no family to consider. Also, dues are waived for any students.) Dues were due July 1st. If you have sent our treasurer (Dr. Ken Brink) dues in the last year, you will be considered to have paid dues for this year. If not, we would ask you to submit them, as this money is used to support our activities with the schools and the public. (We don't buy equipment, as that is the Foundation's function.) Dues should be sent to: Dr. Ken Brink, 16 Greengate Rd., Falmouth, MA 02540. If you send your dues to the Observatory or DYHS, they will be delayed in their transmission to the CCAS Secretary.

I'd note that most CCAS activities will be available to those who do not pay dues, but when we eventually have remote observing online, that might be restricted to those who are dues paying members. Also, we plan to make our

surplus and donated equipment available to members at a reduced rate. It is a small amount, and it is hoped you can pay if you wish to be active in CCAS.

Last Month's Speaker (November): Dr. Frank Isik, CCAS

Date: November 2nd, 2023 at DYHS and on Zoom

Title: Terrestrial & Space Based Telescopes On The Horizon.

Abstract: This is internet research of upcoming ground-based and space-based telescopes that hopefully will be operational and see first light before 2030.

Bio: Dr. Frank Isik obtained his bachelor's degree from Queens College and medical degree from Mount Sinai School of Medicine in New York. After a 5-year General Surgery residency at Boston Medical Center he completed an NIH Cardiovascular Research fellowship and Plastic Surgery residency at University of Washington Medical Center in Seattle. Dr. Isik was recruited to join the University of Washington Plastic Surgery faculty and ascended to rank of Professor of Surgery with an active reconstructive surgery practice and an NIH-funded research program in angiogenesis and wound repair.

During this time, he was a scientific reviewer for the NIH and Department of Defense and other private funding agencies. He maintained his busy reconstructive surgery practice in Seattle when he moved to The Polyclinic, where he also served on the Board. Dr. Isik has 55 publications in peer-reviewed journals, 4 book chapters, and numerous invited scientific and clinical lectures. He served as Associate Editor of Plastic & Reconstructive Surgery Journal, received over \$6.5 Million in NIH and DOD research funding and has gone on cleft lip and palate missions to China and Africa.

After 32 years in Seattle, he retired from the practice of Medicine in 2021 and with his wife, Dr. Nicole Gibran, relocated to Wellfleet, Massachusetts. He now enjoys more time for photography, astronomy, fishing, woodworking, and gardening with his wife. He has two sons in NYC: Alexander, a Merger and Acquisition banker and Oliver, an Anesthesiologist in training. An amateur astronomer and

astrophotographer, Dr. Isik has no formal training in astronomy or cosmology, besides college physics courses, but loves the challenge of astrophotography.

Next Month's Speaker (December 7th, 6:30 PM Zoom Only): Dr. Jim Lynch CCAS and Mr. Yaz Aubrey, FA (tentative)

Title: "How the first stars and galaxies formed – revisited."

Abstract: This was a talk I gave several years ago, and at that point I thought that Dr. Avi Loeb (whose book I followed) and many other investigators had solved this complicated problem, at least in broad brush. Hubble observations and others seemed to confirm their model of quantum fluctuation stretching, dark matter haloes, etc. forming early stars and galaxies, and while there were still some good problems left, the model seemed to agree with the data overall. About a decade or two later, the JWST has come along and shown some pictures that seem to disagree, seeing very evolved structures long before they should be there. In this talk, we'll show the basic theory, try to describe what the JWST saw that disagrees, and (given that the data makes sense) make a wild guess or two at what is causing this.

Directions to Dennis Yarmouth HS and Schmidt Observatory

For information on the location of our Dome behind Dennis-Yarmouth High School, click on the purple button "Old Website" and once there, click on "Meeting Location" viewing the two maps that are there: external for the Dome, and internal to locate the high school library where meetings are held. **NOTE:** We are redoing the website, so that this information may become dated soon. We intend to move any currently useful information to our new website.

For meetings, drive along the south entrance road and go around behind the main building. Park in the lot about halfway down the building and go in the back door and turn down the hall to your left to find the library.

For Star Parties at the Dome, drive in the north entrance road all the way past the north side of the main high school building, through a gate, and on to park near our Dome. You can (and should) park on the grass there.

H&K directions

CCAS hosts a dinner gathering for the speaker (if available), members and friends on meeting nights (just before the meeting) at the South Yarmouth Hearth & Kettle restaurant at 5:45pm (the meetings begin at 7:30 at D-Y.) Please join the group to dine and talk about all things interesting, especially astronomy, before our meeting. The H&K is at 1196 Rt 28, South Yarmouth, about a half mile west of the Station Avenue/Main Street intersection with Rt 28 (stop light). **NOTE:** Since Covid, we have a mix of fully remote and hybrid in-person + remote meetings. Check the newsletter and/or website to see what the format is each month! There are no dinners when the meeting is fully remote.