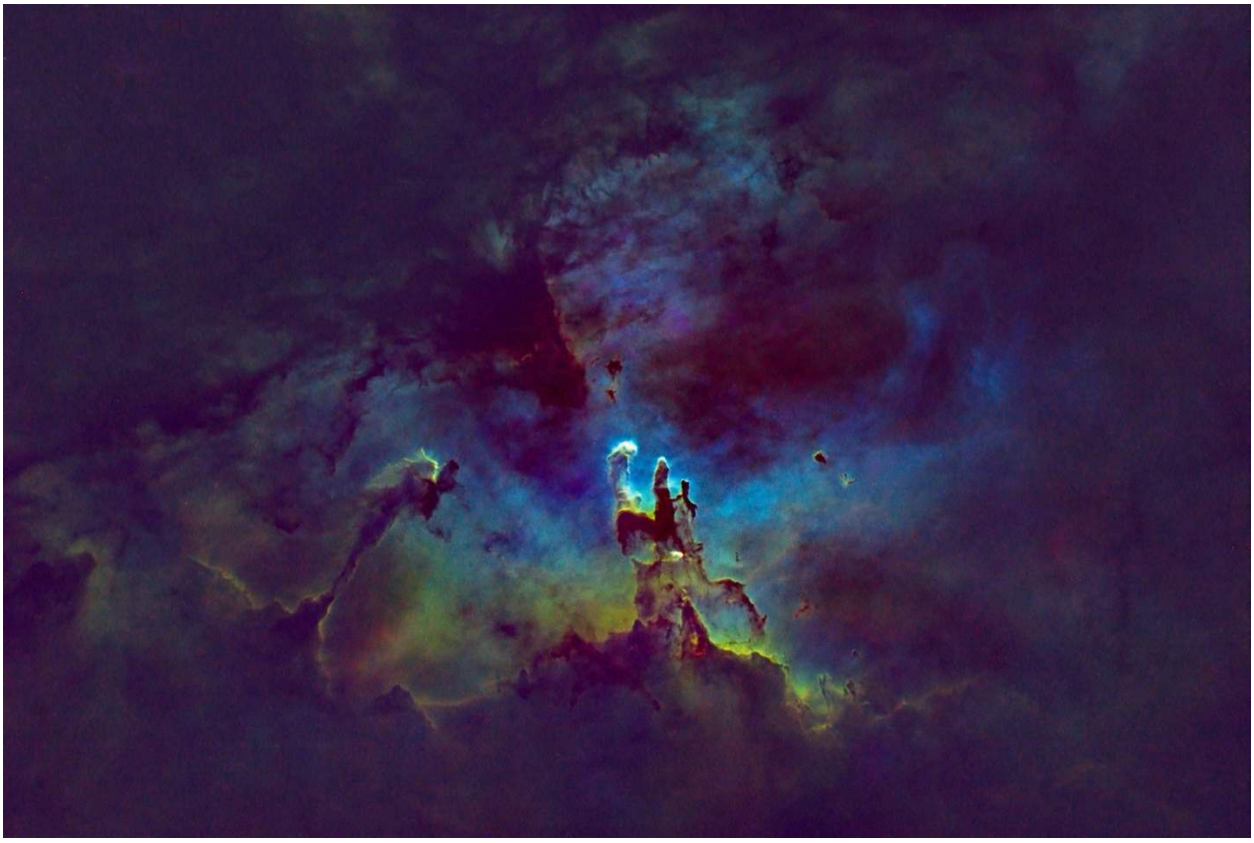
# First Light Lite

August 1, 2026, Jim Lynch (Editor)

### Note From Editor

First, let me apologize for the very short FLL last month. As I said, sometimes non-astronomy matters take precedence in life. I'm working to be a bit more expansive this month. Thankfully, our new CCAS President, Dr. Frank Isik, has come to the rescue with some material, and so let me put his writeup front and center.

## A Note from Your New President



*M16 Eagle Nebula with Narrowband filters.*

Well, here we are — you've gone and elected me president of CCAS, which either shows great faith in my leadership or a serious lapse in judgment on the club's part. Probably both. I'm honored, a little panicked, but mostly excited to spend the next stretch of time thinking about how we move forward together.

The good news is I'm not walking into a mess — quite the opposite. Our star parties draw nice turnouts, the observatory and main scope is about to get a major and much

needed upgrade, we have great outreach events… The list goes on.  Most importantly, the members who show up early and stay late to make it all happen – thank you! My plan is simple: keep doing the things we're clearly good at and take an honest look at where we could be doing better — whether that's how we onboard new members, how we schedule events, or just making sure nobody's standing in the dark (which is hard to do at DYHS).

## September Retreat

Speaking of charting courses, we're planning a September retreat to sit down as a club and really dig into what we could be doing better — outreach, star parties, high school STEM projects, and anything else that falls under the broad and slightly overwhelming umbrella of "other astronomy club activities." More details on date and location soon but save the mental space for it now. And please, if you would like to submit items you would like to see discussed at the retreat, please email me or Jim so that we can put it on the list.

## CCAS Takes the Stage — Sort Of

We've got a genuinely exciting opportunity coming up: the Cape Cod Symphony is opening its 2026–2027 season with Holst's The Planets, and they've invited us to set up a table at Barnstable High School's performing arts center before the show and again at intermission. This is about as perfect a pairing as we're ever going to get — a room full of people primed to think about the cosmos, and us standing right there with pamphlets, a poster, and a scope or two, ready to make our case for why looking at the actual planets beats just listening to music about them (no offense to Holst). It's a great chance to pick up new members and remind the Cape that we exist. We'll need a few volunteers to help work the table — and yes, I'll be there too, partly for club duty and partly because it's been far too long since I've heard a live orchestra. Watch for more details soon.

## Show Us Your Universe

Last thing: that M16 photo up top — the Eagle Nebula — is one I took last week while it's near opposition. I'd love to make it a regular feature of First Light to showcase a different member's astrophotography with each issue, so if you've got a shot you're proud of (or even one you're only sort of proud of — we've all got noisy backgrounds and satellite trails to contend with), please send it my way. Cell phone, smart scope, dumb scope, etc… please send it along for eventual inclusion.

*Thanks, everyone — here's to clear skies and a great year ahead.*

## New CCAS Officers and CCAF Board Members

As mentioned briefly in last month's FLL, we have a new set of officers for CCAS and some new CCAF board positions as well. Frank Isik just gave you a look at the new CCAS President's thoughts. Let me now introduce the rest of the crew.

The new set of CCAS officers is: Frank Isik, President, Jim Lynch, Vice-President, Chris Lynch, Secretary, and Ken Brink, Treasurer.

We also have a new CCAF Board member, Peter Pilon. Jim Lynch will continue on the CCAF Board. Janice Marks has left the CCAF Treasurer position after serving for five years (for which our much-deserved thanks!) Jim Lynch and Mike Hunter will fill in as interim Treasurer until a new permanent one is determined. So, our Board is: Jim Lynch, Chair, Peter Pilon, Vice Chair, Jim Lynch and Mike Hunter, co-Treasurers, Gerry Grenier, Secretary, and George Silvis, At-Large member.

## New Mailing System in the Works

As you have also heard a few times (unless you are not getting these FLL emails, in which case our apol…..oh…never mind), the Outlook mail system went south on us some weeks back. Chris Lynch, Jonathan Hatch, and Gerry Grenier are actively working on a new mail system after several failed attempts to fix the Outlook bug. That bug deleted half of our mailing list, which we've restored by hand. But Outlook is no longer an option, and we hope to have our new Brevo mailing system working soon so that we can provide you with monthly newsletters and other announcements.

## CCAS Dues

CCAS dues were due in July, but don't worry if you're a bit late (so am I). They are $30 per family, students free. Please know that these cover our external activities (whereas CCAF is responsible for WSO and the club's equipment). So, while they're small, they're important. If you've paid already, many thanks! If you haven't, you can pay at our DYHS meeting(s) or via mail to Ken Brink. His address is: 25 Greengate Road, Falmouth MA 02540.

## Star Parties

Given the Cape's marine environment, perfectly clear and cloud free nights are much less common than further inland or at elevation. But as we live on the Cape, that is what we must deal with. We've tried both fixed date and "weather dependent" date formats for our monthly star parties at WSO in the past – both have their advantages

and their drawbacks. At the July business meeting, we decided to look at a third alternative. We will have one fixed-date star party each month with a talk, dome tour, and observing but also keep the option for a second one on the first clear night after the scheduled one if the conditions during the scheduled one didn't allow observing. That way we have a fixed date for people who have to set aside dates and times and also a flexible one for those who are mainly interested in sky observing. We'll see how this goes!

**Updating the 12 ½' WSO Dome Telescope**

One of our biggest frustrations over the past couple of years has been the unreliability of the WSO dome's telescope's operation. Chief culprits have been the system's camera and its computer. The camera was went out for repair in recent months, but with no success. A somewhat less capable replacement camera has been loaned to the Observatory, and is a temporary solution. And the and the computer, now nine years old, was working beyond the limits of its capacity with the result that the software used for guiding the telescope crashed routinely.

As seeing the scope in action and producing (rather impressive) near-real-time images is a "star attraction" (no apologies for the pun) at our WSO star parties, we've needed to take action on this for a while. Such action was taken by the CCAF board at the July 22nd 2026 meeting when the board voted for the funds necessary to purchase a new camera and computer. The board then charged the Observatory staff and the astrophotography SIG to look at the options for these and order the items.

This was done and we are now awaiting the delivery of a ZWO full frame color camera and Lenovo M90t Gen 6 tower computer. The camera and the computer should serve us well in the years to come for both star parties and astro-imaging.

## Speakers

## This Month's Speaker: Dr. Antony Stark, Harvard Smithsonian Center for Astrophysics (an old friend of CCAS)

## Date: August 6th, 2026. 7:30 PM Eastern

## Venue: DYHS (live speaker) and on Zoom.

## Title: Observing the first fraction of a second of the Big Bang

**Abstract**: In the current standard theory of cosmology, Lambda-CDM Big Bang, the parameter "r" represents the tensor-to-scalar ratio. This is the ratio of the power in gravitational waves (tensor perturbations) to the power

in density fluctuations (scalar perturbations) generated at the time of the hypothesized Early Inflation. Although it originated in the very earliest fraction of a second, the value of "r" left traces in the Cosmic Microwave Background, allowing an observational determination of its value. This could be the closest we get to the instant of the Big Bang. Observational programs are underway
at the South Pole and Chile that are planned to yield results within a decade. The history and ongoing effort in instrumentation and logistics are described.

**Last Month's Speakers: Peter Pilon and the Astrophotography Special Interest Group (SIG)**

**Date: July 9th, 2026. 7:30 PM Eastern**

**Venue: DYHS (live speakers) and on Zoom.**

**Title: Introduction to Smart Telescopes**

**Abstract:** - Smart Telescopes are an exciting disruptive segment in the area of astrophotography bringing real imaging of solar system and deep sky objects to a new level of simplicity and affordability. This lecture and group activity will present the basic features and operation of smart telescopes. The first part of the evening will be a short presentation to introduce smart telescopes and answer the questions of what they are, how they work and what they can do. The second part of the evening will be a workshop showing attendees actual smart telescope models and how they operate. Simple operation instructions for some of the popular models of smart telescope will be available for interested participants.

**Precis:** In the past 2-3 years, small, inexpensive ($350 - $1000) imaging telescopes have been introduced by several vendors. These give a pain free entry level solution to imaging the sky and its many wonders. We, as a club, and as individuals, have bought into this technology, and use it at star parties as well as at home. Peter and the Astrophotography SIG gave a very detailed and understandable talk about how these scopes work and how to use them effectively and have graciously allowed us to attach their slides to this email. So, let me just "turn the floor over" to Peter's and the

group's PDF and PPT, which will explain things far more clearly than I can. They are attached to this email.

**June's Speaker: Dr. Keaton Bell CUNY NY**

**Date: June 2nd, 2026. 7:30 PM Eastern**

**Venue: DYHS and on Zoom. Speaker remote.**

**Title: White Dwarf Asteroseismology**

**Abstract:** Queens College astronomer Keaton Bell uses video recordings from space telescopes to measure vibrations of dead stars called white dwarfs. White dwarf stars are the glowing hot embers left over when most stars run out of nuclear fuel. Some white dwarfs vibrate spontaneously, revealing resonant frequencies of the stars that can be used to map their interior structures. This presentation will describe the physics of stellar vibrations by analogy with the physics of musical instruments, which Keaton teaches a course on at Queens College. We will discuss the importance of studying white dwarf stars and review how the QC White Dwarf Research Group studies their structures by interpreting video recordings of vibrating white dwarfs. This talk will explain some of the newest breakthroughs in the field of white dwarf asteroseismology.

**Precis:** Keaton sent me this following message: "My PPT presentation is 500 MB large and probably doesn't make much sense without explanations. I gave a shorter version of this talk previously at my college. Would this link work as an alternative for those who missed the talk? https://www.youtube.com/watch?v=bTowNS2Xb1g" I think logging into his YouTube channel presentation is a great way to see what he talked about to our club, even if you've seen it once before!

**Coming speakers this fall**

After the summer days have passed, there is still the cooler and quieter fall to look forward to, and we have some great speakers to share it with.

**September Speaker – Dr. Jessie Christianson, Caltech.** Exoplanet topic, title and abstract TBA.

**October Speaker – Dr. Shveta Suvarna.** Women in astronomy topic, title and abstract TBA

**October Speaker – Dr. Charlie Lada, HSCfA.** Andromeda galaxy topic, title and abstract TBA.

**December Speaker – TBA.**

## Directions to Dennis Yarmouth HS and Werner 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.

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.

## Sea Dog restaurant directions (No longer H&K, which recently closed)

CCAS hosts a dinner gathering for the speaker (if available), members and friends on meeting nights (just before the meeting) at the Sea Dog restaurant at 5:30 - 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 Sea Dog restaurant is located at 23 White's Path in South Yarmouth. Its phone is 508-694-6020. Chris Lynch has called ahead to confirm this new venue (as the H&K no longer has evening dining.)

**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! Sometimes there are no dinners when the meeting is fully remote.