

First Light Lite

February 1st, 2018

Jim Lynch, Mike Hunter, Gus Romano - Interim Editors

January News

January was pretty quiet for CCAS, as both the meeting and Star Party were cancelled due to weather. Our communications efforts and the CCAF board meeting went on as usual, and the DY HS students successfully finished their honors projects, so things weren't totally static!

For the business meeting part of the agenda for February, we are planning to have Jim Lynch talk about revving up the Membership Committee, as the Web Committee and Communications Committee efforts have reached their first order goals, and we can move to the next steps. Also, Mike Hunter and/or Joel Burnett will talk about the latest Foundation initiatives.

February 1st CCAS Meeting Speaker and Topic

Dr. Ken Brink, CCAS and WHOI

How's the Air? - Planetary Atmospheres

As more and more exoplanets are discovered, the question of habitability becomes increasingly relevant. One of the key constraints is a planet's atmosphere. Earth's atmospheric composition and its history are first reviewed, and the importance of biological feedback in shaping current conditions is emphasized. Other Earth-like planets, Venus and Mars, are discussed to show how their histories diverged. Less Earth-like systems are also touched upon. Finally, means of detecting life using atmospheric information alone are discussed. All of the above considerations revolve around the idea that life depends on having liquid water and a carbon-based biology, and we need to be cautious about this assumption.

Ken Brink studied applied physics as an undergraduate and physical oceanography in graduate school. After a brief stay at Oregon State University, he has worked at the Woods Hole Oceanographic Institution since 1980. His research over the years

has mainly dealt with currents over the continental shelf, and how they affect ocean chemistry and biology.

Upcoming Speakers and Topics

March - Dr. Frank Primini, HSCfA. Micro lensing.

April - Dr. Anastasia Fialkov, HSCfA. Fast Radio Bursts.

May - DY HS student honors projects (tentative)

June - Dr. Marion Dierickx, HSCfA. Galaxy Satellite Collisions.

July - Dr. Jim Lynch, CCAS. Spectroscopy - Basics, With a Live Demonstration.

NOTE: Drs. Larry Marschall and Jim Lynch will be repeating their "LIGO" and "Drake's Equation" talks at WHOI this spring. Larry's talk will be on 5/2/18, and Jim's on 2/21/18. These seminars will be held in the Smith Building seminar room at 1215 PM on a Wednesday. The seminar room is right by WHOI's main desk in Woods Hole Village, and is very easy to find. Parking is metered - bring quarters! You are cordially invited to attend!

Star Parties

Winter season once per month "QUARTER MOON SATURDAY STAR PARTIES", **all open to the public**, begins September 23rd, 8:30-10:30PM.

From September thru June, we will have one regularly scheduled Star Party each month taking place at 8:30-10:30pm on the Saturday closest to the date of First Quarter Moon (about 7 days old).

From July through August, we will have three or four regularly scheduled Star Parties each month taking place on Thursdays at 8:30-10:30pm.

When the moon is near its First Quarter, the terminator (the line dividing light from dark) is favorable for viewing sunlight or shadow on the sides of craters. This time is also favorable for observing the dark side of the moon occult (visually cover)

stars in the sky as the moon moves in its orbit. Depending upon the calendar, we may also be able to observe planets and other celestial objects.

Here is the schedule for “Star Parties” through June, 2018; **the public is invited:**

Saturday, February 24th

Saturday, March 24th

Saturday, April 21st

Saturday, May 19th

Saturday, June 16th

POSSIBLE CANCELLATIONS for Star Parties: Cancellations will be very rare since we have lots to do "inside" as well as outside. Even if the forecast is "iffy"; the Staff Leader for the night may elect not to cancel in spite of possible clouds. If clouds arrive after staff and guests have convened, a virtual Star Party will usually take place indoors to include overviews of the sky for that night using computer simulations with our big screen TV, videos of interesting sky events recorded previously, demonstrations and/or training on the use of scopes and other equipment, and consultation/discussions on things astronomical, etc.

However, sometimes a solid forecast for overcast or rain or a storm will result in cancellation of a given Star Party. **IF IN DOUBT ABOUT THE WEATHER AND THE STATUS OF A STAR PARTY, CALL THE OBSERVATORY AT 508-398-4765 AFTER 7:45 pm.** No answer means the event has been cancelled.

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.

For meetings, drive in the south entrance road and go around behind the main building. Park in the lot about half way 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.

H&K directions

Please be reminded that Gus Romano or his delegate “host” a dutch-treat dinner gathering for members and friends each CCAS meeting night (before the meeting) at the South Yarmouth Hearth & Kettle restaurant at 5:45pm; (the meetings begin at 7:30 at D-Y.) The speaker for each meeting is always invited. Please join the group to dine and talk about all things interesting, including astronomy, each month 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).