

Cape Cod Astronomical Society - Minutes of the February 5, 2015 meeting

Attendance: Total 14 members, 3 guests

The meeting was held at the Dennis-Yarmouth High School Library.

Tonight's speaker: Dr. James F. Lynch, Senior Scientist, Applied Ocean Physics & Engineering, Woods Hole Oceanographic Institution. His topic: "Acoustics and Astronomy – With a Small Dose of Salt Water"

What is sound? – A vibration transmitted through an elastic solid, liquid or gas. Related to astronomy, sound can also be propagated through plasma (e.g., in a star's core or through the Northern Lights).

"In space, no one can hear you scream" (tagline from Alien), which is why we mostly count photons in space as there are only 10 hydrogen atoms per CC.

In the ocean or in the earth's crust, acoustics are useful for measurements: density, pressure and temperature effect speed. Likewise, acoustic devices have been used on the moon via the Apollo program to make direct seismic measurements.

Astroseismology can take the "pulse" of stars by looking at light curves and applying seismic theory. Sonification takes a time series of radio or EM signals, converts them to sound, and the result allows the ear to discern data that the eye cannot.

The slides from Dr. Lynch's presentation are available from Gus Romano or Peter Kurtz.

At the conclusion of Dr. Lynch's presentation, regular Society business was discussed:

- The 6 inch Criterion and mount were donated to Berklee College of Music.
- Bernie is in the process of selecting and ordering spectrometry hardware and software through the Foundation.
- Bernie had a number of school programs scheduled (Eddy Elementary School 5th graders, Sandwich Stem Academy), the latter postponed due to weather and rescheduled for February 25.
- Monthly Star Party is scheduled for Saturday, February 21.
- There is a student from Plymouth interested in pursuing astronomy for a career who wishes to be mentored. Bernie and also member Larry Brookhart will be working with her.

The meeting was adjourned at 9:25 PM.

Respectfully submitted,
Gus Romano, CCAS Secretary