

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

Attendance: 29

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

The meeting's speaker was Dr. Timothy Barker, Professor Emeritus of Astronomy at Wheaton College. Dr. Barker's topic was "Samples from the Moon".

Tim discussed the scientific findings from the Apollo missions of the late 60s and early 70s, as well as anecdotes about the astronauts and NASA.

- 400,000 people in many different jobs and industries supported the missions.
- Each flight was extremely dangerous and each nearly failed.
- Early emphasis was political rather than scientific (i.e., cold war with the Soviet union and President Kennedy's goal to be first).
- There was occasional resentment on the part of the astronauts towards NASA (for example, the postage stamp incident where NASA was seen to publicly embarrass the astronauts for something trivial).
- Initially the astronauts and scientists were scornful of each other, but later emphasis was scientific, with Apollo 15 landing on a more risky site, Hadley Rill. Eventually a geologist, Harrison Schmitt, flew to the moon (Apollo 17). He helped discover that there was fairly recent (in geological terms) volcanism on the moon 100 million years ago.
- Moon was formed by a collision with a large object.
- "Paradox is the Driving Force of Science": mare region, despite few craters, was formed close to the same time as the highlands with many craters. Explanation: very early impacts occurred at 30 times the later rate, and the mare region formation covered up the craters.
- During the presentation, Dr. Barker encouraged the audience to come up and examine moon samples obtained from NASA, as well as a meteor sample from Mars (based on Viking space craft analysis of the Martian soil), a piece of rock thought to be from an asteroid, and a piece of a metallic meteorite.

Questions and answers followed.

The meeting was adjourned at 8:55 PM.

Next meeting: December 3, 2015. The speaker will be Dr. James Lynch, Senior Scientist at Woods Hole Oceanographic Institution, who will present: "Black Holes - Their Ins and Outs (Mostly Ins)".

Respectfully submitted,
Gus Romano, CCAS Secretary