

Minutes of the June 20, 2009 Meeting of the Charlie Elliott Chapter of the AAC

The meeting was held at the Charlie Elliott Wildlife Visitor Center and called to order at 5:20 p.m. by CE Chapter Director Theo Ramakers. The final meeting attendance was 29 members and guests, with 21 members and guests on the observing field afterwards.

This being a pot-luck dinner / meeting, business was suspended after welcoming remarks by Theo until mealtime was completed. Official proceedings resumed at 6 p.m. when our featured speaker, Jim Honeycutt, gave his presentation "The Distance Ladder". Since we can't use a measuring tape to measure distances, astronomers have developed techniques that allow us to measure distances to celestial objects. While nine methods of making distance measurements were included, only six are the most important. No one measurement will do the job so it takes several to do the job, but they do overlap others and serve as a check for reliability. The farther out the object is, the less accurate is the measurement. "Parallax" is measured observing the shift in a closer star, as seen from the Earth on two different sides of its orbit around the Sun and is accurate as long as the angle can be measured. The next step involves Cepheid variables (a kind of variable star that varies in brightness by shrinking and then expanding and which was discovered in the constellation Cepheus); Cepheid variables can be seen both in star clusters within our Milky Way and also in other galaxies fairly close to our own Milky Way. The next two are supernovae of types Ia and II, very massive stars which have reached the end of the existence by exploding so brightly that they are even brighter than the galaxies in which they are located. The last step (or "rung" in the Ladder) is Hubble's Law, named for astronomer Edwin Hubble who discovered that the farther away a galaxy is, the faster it is moving away from us thus the universe is expanding,

After a short break was Jon Wood's "Observing 101" segment which included his always striking renditions of planetary positions, meteor showers and cometary phenomena for the next several weeks.

Theo's "Current Events in Astronomy & Space Exploration" included:

- Coverage last month and coming month highlights of CE's outreach program.
- Updates of images and observations by CE astronomy chapter members in the past month, with images of Sunspot 1019 by Marie Lott and Stephen Ramsden and images of Jupiter indicating the shift from Saturn to Jupiter for the planetary fans as well as an image from M17 by Paul Tankersley.
- News of the beginning of the Noctilucent Cloud season and highlights of the Hubble Space Telescope Servicing Mission 4 by the space shuttle Atlantis.
- Space exploration & information images of the LRO/LRCOSS, and ESA's missions of the Planck and Herschel telescopes.

Theo's presentation can be viewed online at <http://ceastronomy.org/blog/wp-content/uploads/2009/PresentationDownloads/CurrentEvents2009-06.ppt>

The meeting was adjourned at approximately 7:30 p.m.

The next CE chapter meeting will be 5 p.m., Saturday, July 18, when former CE chapter director Larry Owens will present "The Philosophy of Astronomy".

Respectfully submitted,

Ken Posedly
Recording Secretary