

Cape Cod Astronomical Society

Minutes of the December 5, 2013, meeting

Attendance: Total: 20 Members: 20

President Mike Hunter opened the meeting at 7:30 P.M. and welcomed members and guests. Mike brought members up to date regarding upcoming events.

The speakers for the evening CCAS President Mike Hunter and Bernie Young. The lecture was entitled “**Astrophotography: Move It or Keep It Still**” Much of astrophotography is concentrated on still images. Mike Hunter explained his own experiences with astrophotography. He is a self-taught photographer and shared his early attempts as well more recent beautiful astro photos. One of the most difficult tasks in astrophotography is focusing the camera. If you are using a SLR camera, the auto focus system may not function properly due to the low lighting conditions. Many photographers use a homemade focusing device that helps to provide accurate focus. During long photo sessions, many photographers check the focus several times to ensure that the focus has not changed due to cold weather making a slight change to metal parts of the telescope. A sample of a homemade focuser was shown. Mike explained the basic terms necessary to understand and work with still and other cameras. ISO and shutter speed were discussed in detail. It was interesting to note that the settings for astrophotography can be very different than daylight photography due to long exposures in low light.

Recent technical advances have made video photography available to amateur astronomers at reasonable prices. Bernie Young took us through the available range of equipment and techniques. One readily available video camera is the web cam. These cameras are inexpensive and are capable of taking good quality photographs. They are generally limited to bright celestial objects and need a PC to view images. This is a good place for many photographers to start. Consumer type video cameras can also be used for astrophotography. No matter what type of camera system you choose, it makes sense to understand the limitations and equipment needed. Some cameras can be mounted to the optical tube of the telescope. Others require special adapters to connect to the scope. Another advance for photographers is the advent of “live view” cameras. This feature allows instant feedback and the ability to observe in color.

Deep sky viewing requires some different techniques. Many photographers take multiple exposures of the same object and stack them. Stacking or combining multiple images requires both patience and special software for this process. Video astrophotography is now accessible to most amateur astronomers. For more information regarding this subject please visit the following link

<http://www.nightskiesnetwork.com/>

The meeting was adjourned at 9:30 P.M.

Respectfully submitted,

Charles Burke