

The August meeting was called to order by Bob Frostick at 7:35 pm.

Night Sky – Brent Ogle

Brent reviewed highlights of the recent night sky, including the Perseid Meteor shower, for which he shared a computer simulated graphic that shows how the meteor field interacts with Earth. Brent also reviewed the recent Mars Lander developments, the Occultation of Venus, and observations of a new star galaxy with extreme star production using the Chandra X-Ray Observatory. Brent's usual Night Sky handout will be posted on the website.

Stars and Their Life Cycle – Ed Balthazar

Ed Balthazar, a professor at the University of Charleston, made a presentation on the life cycle of stars. Ed reviewed how fusion occurs to produce heavier elements from hydrogen, releasing the enormous energy of stars. He reviewed how the mass of a forming star determines the star's temperature and brightness. Brightness and temperature are plotted on a Hertzsprung / Russell diagram – stars will fall along a relatively straight line on the diagram until they reach the end of their life, becoming red giants or white dwarfs. Ed reviewed variable stars, and what causes them to oscillate toward the end of their lives. Stars that are more than 8 solar masses tend to become red super giants rather than white dwarfs, and their molecular fusion progresses all the way to iron. Red giants will collapse and explode to form super novae – higher weight elements are transmitted through the universe from these explosions, and become part of future stars. Supernovae can form neutron stars, in which huge pressures cause subatomic particles to fuse and become neutrons – these spinning neutron stars result in pulsars. If the supernova is more than 15 solar masses, the neutrons can collapse and form a black hole. Black holes are believed to be at the center of galaxies, and may well be why galaxies form.

Ed's presentation was very informative, and we very much appreciate him being our guest speaker in August.

New Telescope

Ed, Chuck, and Rodney updated the Club on developments around telescope replacement. We are purchasing a new tube for the 16-inch reflector that we got from Chuck, Ed is working on how to get rotating rings, and will likely have some made within our budgeted amount. Chuck is leading preparation of the grant application, and Rodney is preparing and posting an ad to sell our current scope.

September Picnic

The September meeting will be at Breezy Point, and will be our annual picnic. The Club will provide hamburgers, hot dogs, drinks, and condiments. Members are requested to bring a dish to share.

The picnic will be on Saturday, September 22, starting at 5:00 – 6:00 pm. Rain date, if needed, will be the next week, September 29. Watch your E Mail in case of rain – and be sure to give Robert Dean your E Mail address if he doesn't have it already.

January Annual Dinner

Please suggest places we could hold the January annual dinner – be thinking about options, and we will decide where we will hold the dinner at a future meeting.

Blackwater Falls

Chuck is coming down the home stretch in lining up speakers – he needs one more. We have good topics lined up, including presentations on Chasing the Venus Transit, The Geology of Mars, Meteorites, Telescope Collimation, Near Earth Asteroids, and the Particle Zoo Connection.

Chuck has prepared raffle tickets for both the iPad and the 8-inch telescope that Becky Littleton donated. Everyone start selling tickets, and bring sold tickets and money to the September meeting.

We will post a picture of the donated telescope on the website.

October Meeting

The Board decided to have the October meeting at our Blackwater Falls outing, instead of having a separate meeting the week after Blackwater.

We still need presenters for the November and December meetings. Blackwater Falls.

Sherman Library Books

The Sherman High School library is trying to renew their collection of books. If anyone has suggestions on titles for astronomy books for high-schoolers, please post them on our Google group. Everyone was encouraged to join our Google group – it's a great way to share information.

We adjourned the meeting at 8:45 pm.

Submitted by John Willson, Secretary.