

Delmarva Stargazers  
January 3, 2012

Introduction of members:

- No one got anything for star gazing related Xmas except Chuck Jennings.

Jerry has pictures of the sun – it's very active right now  
And he reminded people the club's solar scopes are available to members.

January 4<sup>th</sup>: morning quadrantids.

PJ And the Newsletter:

- JPL provides a article to newsletters – and gave us an award for our newsletter.

Outreach Perryville library outreach.

Tim Milligan: Object – Thor's Helmet

- NGC 2359
- Emission nebula bright cloud usually by UV radiation.
- Driven by a Wolf Rayet star – normal stage of a massive star's life – just before it goes supernova. Becomes a Red Giant – by helium flashes. (check to see if red giant befor or after WR)
- Heavy elements boil to the surface, convection cause4s the intense stellar winds driving most of the mass of the star.
- The ejected gas becomes a planetary nebula.

- Charles Weyet and Georeges Rayet discovered it. Unusual spectra. High speed jet with broadening bright emission lines of the heavy elements brought to the surface (lines are widened by the Doppler effect).
- Showed a slide of the spectra – emission lines are quite wide – Doppler widening.
- IN Cma angular size 8 arc-minutes.
- 6” or smaller scope should reveal a rectangular object. Best seen with a UHC filter or OIII filter. Challenge is the see the bubble at one end of the bright rectangle.
- 10” will reveal even more without a filter (darker skies are better) might see faint arcs extending from the bubble.

#### Mirror Making seminar:

- 14 people registered already. Three or four more that are interested.
- Last year there were 17 tables in use and three upstairs. (Ed. - yes, I was sleeping in one of them).
- Mirror coating: Optic Wave Labs (California) has ½ price til the stock market hits 14,000.

#### Jerry Truitt: Presentation on Size and Distance - Putting things into Perspective:

- This was a Power Point presentation showing the relative sizes of the solar system, the galaxy, local group of galaxies and outward.