## Minutes of the November 5, 2011 Meeting of the Charlie Elliott Chapter of the AAC

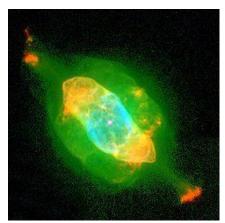
The November 5<sup>th</sup> meeting of the Charlie Elliott Chapter of the Atlanta Astronomy Club was held in the CEWC Visitor Center in Mansfield, GA at 4 PM with thirty-three people in attendance, including several members of the Atlanta Outdoor Club.

Dr. Julius Benton, coordinator of the ALPO (Association of Lunar and Planetary Observers) Saturn Section, presented a talk about observing and researching Saturn. He reviewed the equipment needed, sample observing forms, nomenclature, and showed many examples of outstanding "amateur" photography. His presentation may be viewed at <a href="http://bit.ly/Benton-Saturn-talk">http://bit.ly/Benton-Saturn-talk</a>.

Observing supervisor Steven Philips gave the monthly "Observing 101" talk, a highlight of current sun, moon and planet rise & set times, and observing targets.

Selected events visible during the months of November & December 2011:

- Nov 1 Dec 31 Comet Garradd continues to travel through Hercules
- Nov 8 Asteroid 2005 YU55 closest approach
- Nov 8/9 Moon near Jupiter after sunset
- Nov 9/12- Mars 1.4° north of Regulus at midnight
- Nov 17 Leonid meteor shower peaks
- Nov 25 New Moon
- Nov 26 Thin crescent moon in the southwest 4° right of Venus after sunset
- Nov 28 Asteroid Eunomia at opposition. Gliding through southern Perseus, it crosses the California nebula in late November.
- Dec 7 Mons Rumker visible on waxing gibbous moon
- Dec 14 Geminid meteor shower peaks



NGC 7009, the Saturn Nebula Wikipedia Commons

**Small Telescope/Binocular Target List**: double stars Albireo, 61 Cygni & Gamma Delphini; galaxies M31 & M33; globular clusters M2, M13 & M15; planetary nebulas M27 & M57, NGC 7009 & NGC 7662; open clusters M39, NGC 457, Trumpler 37.

The featured object for November is **NGC 7009** – **the Saturn Nebula** in the constellation Aquarius, also known as Caldwell 55. Discovered by William Herschel on Sept 7, 1782, it was named the Saturn nebula by Lord Rosse in the 1840s due to its superficial resemblance to the planet Saturn with its lobes nearly edge on to the observer. The precise distance to this nebula is unknown due to a lack of reference stars in its immediate vicinity. The most recent estimated distance is 5,200 light years. The Saturn Nebula is a complex planetary nebula with multiple shells, a halo, jet streams, ansae (handles), and small scale knots and filaments. The nebula was created when a low mass star was transformed into a hot blue dwarf star and blew off its outer layers. The ultraviolet radiation from the central star is believed to create the fluorescent tint of the nebula via doubly ionized oxygen. The ansae are still expanding away from the central star. This central star has a visual magnitude of 11.5 with a temperature of 55,000°K and absolute luminosity of approximately 20 suns.

A large crowd with 19 telescopes and binos made it to the Jon Wood Astronomy Field under clear skies to observe the moon, two ISS passes and the transit of the GRS and Io on Jupiter.

The next meeting of the chapter will be the quarterly potluck, followed by observing on the field, on Saturday, December 17, 2011 at 3 PM in the Charlie Elliott Visitor Center in Mansfield, GA. All are welcome.

Respectfully submitted,

Marie Lott CE Recording Secretary