

Astronomy Club of lompoc Presents The Sidereal Times



Messier 31 Galaxy(see page 5)

Meeting News:

At the July meeting we discussed changing the club Logo and representing the club at an old town display.

Reminder: VAAS club meeting August 9th 7:00 pm
Manzanita School Teachers Lounge.



Lunar Calendar

New Moon 1st
Full Moon 15th

The Portable Planetarium



Presidents Message

Hello, Star Searchers,

We are not going to talk about our nightly weather. Okay? Nope. No point. Nada. Don't mention it.

Whew! Now that I got that out of the way, thank you, all in attendance at July's meeting, for taking action on our group's name. Such a move should never be taken lightly, but I think, despite the emotions involved, everyone acted with the best intent for the future of the Astronomy Club of Lompoc.

And a big thank you to all of you who have contributed proposals for our logo. I personally think we could follow Louise Gray's advice to rotate these through our website for the coming months, showing off our members' creativity. A logo is important for outreach and marketing. A "permanent" logo should be a visual summary of our group's spirit; in due time we will decide accordingly.

Thank you, Jana, for the supporting materials you supplied for our display at the July 18, VAFB "Block Party" for newly arriving base families. A last minute gig, I was able to easily manage the table, and enjoyed enthusiastic conversations with over a dozen airmen or family members. Who knows: we may have found our new "Wallace family" among those who stopped by.

See you all on August 9th, when Dr. Joe Bassi returns, this time celebrating the 50th Anniversary of Apollo 11.
Tom

Events

August 1st Star Party at the Observatory. and also a New Moon. This is the best time of the month to observe faint objects such as galaxies, clusters and nebulae.

😊 Yea!

August 9th Mercury at greatest Western Elongation of 19.0 degrees from the Sun. This is the best time to view Mercury since it will be at its highest point above the horizon just before Sunrise.

August 12th Perseids Meteor shower is one of the best meteor showers to observe producing up to 60 meteors per hour at its peak. It is produced by debris left over from comet Swift-Tuttle. Best viewing will be after midnight on the 12th. Meteors will radiate from the constellation of Perseus but can appear anywhere in the sky.

August 24th Star Party at the Observatory

😊 Yea!

August 31st Star party at the Observatory / Figueroa Mt.

😊 Yea!

Waiting for the show



Star party's and Events

July 6th Star Party at the Observatory / Figueroa Mt. Cancelled due to weather.



July 13th Star Party at the Observatory, Cancelled again due to weather.



July 27th Star Party at the Observatory, Foiled Again by the Lompoc / VAFB Gloom!



Star party Figueroa Mt. (Old Photo)



Star Party Observatory (Old Photo)



August 2019 Moon

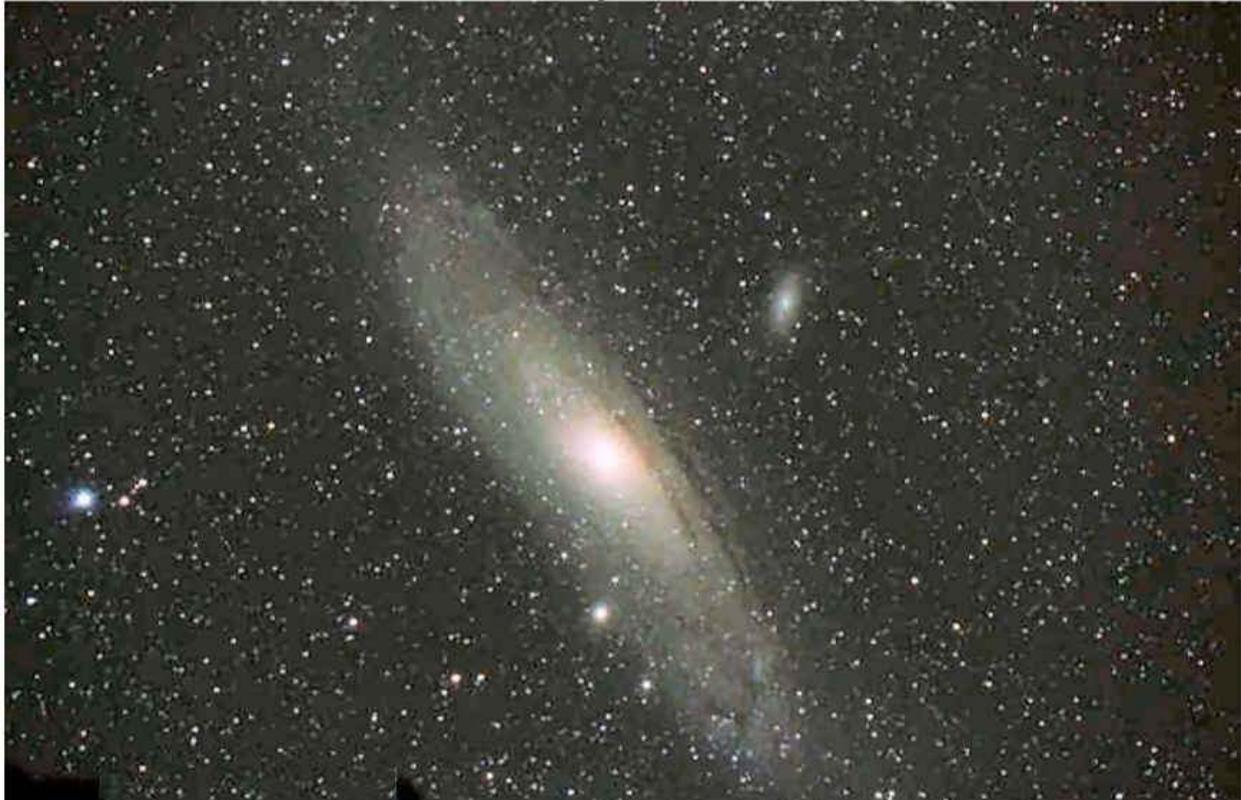


Full 15th, New 1st, Last Quarter 23rd, First Quarter 7th.

Moon Facts

Both sides of the Moon see the same amount of Sunlight. The Moon has only been walked on by 12 people, all American males.

Photo Courtesy of David McNally



The Andromeda Galaxy also known as Messier 31 NGC 224 is a spiral galaxy approximately 780 kiloparsecs (2.5 million light years) distant. It is the nearest major galaxy to the Milky Way and is often referred to as the Great Andromeda Nebula in older texts. It received its name from the area of the sky in which it appears, the constellation of Andromeda. It is approximately 220,000 light years across. It is the largest galaxy of the local group also containing the Milky Way, Triangulum galaxy, and other small galaxies. Despite earlier findings that suggested that the Milky Way contains more dark matter and could be the largest in the grouping, in 2006 observations by the Spitzer Space Telescope revealed that the Andromeda galaxy contains one trillion stars at least twice the number of stars in the Milky Way galaxy that is estimated to be 200-400 billion. The mass of the Andromeda galaxy is estimated to be 1.5×10^{12} solar masses. The Milky Way and the Andromeda galaxies are expected to collide in 4.5 billion years eventually merging to form a giant elliptical galaxy or perhaps a large disk galaxy. The apparent magnitude of the Andromeda galaxy at 3.4 is among the brighter of the Messier objects making it visible to the naked eye on Moonless nights or when viewed from areas with moderate light pollution. Image capture sigma 170-500 f/5.6 telephoto lens. Canon T3i modified Baader filter, Celestron CGEM mount hypertuned. DSS 3.3.4 processing software. Frames 20 by 120" 0.7 hrs integration time.

For What its Worth

Planet Names Derived:

Roman mythology named most of the eight planets in the solar system. The Romans bestowed the names of the gods and goddesses on the five planets that could be seen in the night sky with the naked eye. Jupiter, the solar systems biggest planet was named for the king of the Roman gods, while the reddish color of the planet Mars led the Romans to name it after their god of war. Mercury, which makes a complete trip around the Sun in just 88 Earth days, is named after the fast moving messenger of the gods. Saturn, the solar systems second largest planet, takes 29 Earth years to make a full revolution of the Sun is named for the god of agriculture. The Romans named the brightest planet, Venus, for their goddess of love and beauty. Two other planets, Uranus and Neptune, were discovered after the telescope was invented in the early 1600s.

Astronomer William Herschel, who is credited with discovering Uranus in 1781, wanted to call it "Georgium Sidus" (Georges Star) for the British ruler King George III. Other astronomers were interested in dubbing the planet Herschel. German astronomer Johann Bode who recommended the name Uranus, a Latinized version of the Greek god of the sky, Ouranos: but the name Uranus didn't gain full acceptance until the mid 1800s. Neptune, the planet farthest from the Sun makes a solar revolution every 165 Earth years. It was seen by telescope in 1846 by German astronomer Johann Gottfried Galle using the mathematical calculations of French astronomer Urbain Le Verrier and British astronomer John Couch Adams. There was some discussion of naming the planet after Le Verrier but ultimately Neptunes vivid blue color got its name from the Roman god of the sea. Pluto was classified as a planet in 1930 before being stripped of that celestial honor in 2006 was named after the Roman god of the underworld. An 11 year old English schoolgirl, Venetia Burney suggested the name Pluto. As for Earth, currently home for an estimated 7.3 billion people, Earths name comes not from Roman or Greek mythology but from old English and Germanic words meaning "ground".

Planets & Greek Mythology: Greek Gods and Goddesses lived high up in the sky on Mount Olympus These Gods and human heroes that were deemed worthy can be found in patterns of the stars in the form of constellations and Greek Mythology. **Pegasus** in the northern sky is named after the winged horse Pegasus that was born from the blood of the Monstrous Medusa. **Centaurus** is one of the largest constellations and was named after the half horse man. **Orion** named for the hunter and is located on the celestial equator. Orion died after being stung by a Scorpion, but he is safe in the sky since Orion sets in the West and the Scorpion rises in the East. **Argo Navis** in the Southern sky is named for the ship that Jason and the Argonauts sailed to Colchis to steal the golden fleece. It is divided into 3 constellations, Carina (keel or hull of the ship), Puppis the (stern) and Vela the (sails). **Mercury** named after Hermes who was the fast messenger god. Mercury is the fastest moving planet. **Venus** named after Aphrodite was a beautiful goddess and is also the brightest planet in the sky. **Mars** named after Ares who was a hot tempered god and Mars is a fiery red planet. **Jupiter** named after Zeus the most powerful god and is the largest planet in the solar system. **Saturn** named after Cronus who was Zeus's father always in a powerful struggle with Zeus. Saturn is the 2nd largest planet. **Uranus** Uranus was Cronus's father. Uranus is the sky god. **Neptune** Named after Poseidon and resembling the ocean waves where Poseidon ruled. **Pluto** Named after Hades. It is the farthest object in the solar system just as Hades the god of the underworld was removed from everyone else.

Earth: The modern English word and name of our planet "Earth" goes back at least 1000 years. Just as the English language evolved from Anglo-Saxon (English-German) with the migration of certain Germanic tribes from the continent to Britain in the 5th century A.D the word came from the Anglo-Saxon word "Erda" and its Germanic equivalent "Erde" which means ground or soil. In old English the word became 'eor(th)e' or 'ertha'. The origins of the word may be from an Indo-European language base 'er' which produced more modern adaptations of the word used in languages today. Of all of the planets names Earth is the only one in our solar system that does not come from Greco-roman mythology.

Club Officers



President
Tom Gerald

Vice president
& Treasurer
Jana Hunking



News Letter Editor
Vahan Yeterian

*“Astronomy compels the soul to look upward,
and leads us from this world to another”.*
(Plato 428 – 347 BC)

Possible New Club Logo



Club Meeting

Reminder Club meeting August 9th at
7:00Pm Manzanita School teachers Lounge.

Star Parties (as always weather permitting)

Other Astronomy Club Meetings

Central Coast Astronomical Society

Link to web site...

<http://www.centralcoastastronomy.org/>

Santa Barbara Astronomical Unit

Link to web site...

[http:// www.sbau.org/#AU_EVENTS_Calendar](http://www.sbau.org/#AU_EVENTS_Calendar)

Night Time Bright Objects (no scope required)

Link to “Heavens Above” web site

[http:// www.heavens-above.com/](http://www.heavens-above.com/)

(Iridium Satellite)

(ISS Visible Pass)

Be sure to set the nearest location from their
pull-down menu.

The web site link below will take you to some
Great Milky Way interactive images and how
It was developed. (Type it in the search box.)

<http://skysurvey.org/>

VAAS.

Dave McNally is the VAAS Web Site Serf/Minion

Dave

