

ASTRAL PROJECTIONS

MARCH 2019
VOLUME 30 ISSUE 3



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Cover Photo

*A candid shot capturing the camaraderie and conversation often found at one of ASTRA's regular meeting-after-the-meetings held at a local diner. Everyone is welcome to break bread with us!
Image credit: Chris Savia*

EVENT CALENDAR

March 8th - Monthly Meeting

Location: Ocean County College, Novins Planetarium, Building #13

Following club business, Ryan Knipple will give a presentation called "Why Is Mars Red?" where he will discuss the properties of the martian surface.

Time: 7:00 p.m. - 10:00 p.m.

March 9th - Jakes Branch Star Party

Location: Jakes Branch County Park, Beachwood, NJ

Time: 6:30 p.m. - 8:30 p.m.



For Your Information...

NASA's Space Place is now called Night Sky Notes.

Club Dues Are Due!

As of 2019, member dues have been reduced to \$15 for current members. New members, and current members who aren't paid up by March 31st will pay \$20 in dues.

A.S.T.R.A.

**Robert J. Novins Planetarium
Ocean County College
P.O. Box 2001
Toms River, NJ 08754-2001**

EVENT CANCELLATIONS

Members will receive an email notification of an event cancellation, or call the ASTRA Hotline: 609-971-3331

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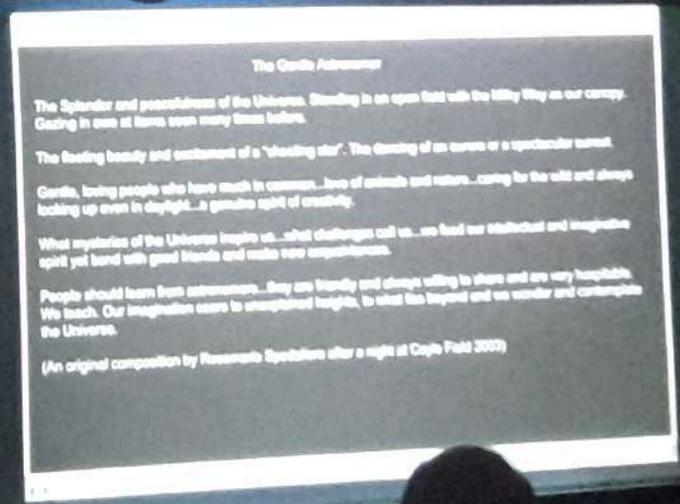
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RECAP



ASTRA Meeting, Friday February 8, 2019

There's a special intimacy which comes with meetings being held again in the planetarium classroom. Either our member roster is booming, or we're reminded how small the site can be, or both!

ASTRA Treasurer Ro Spedaliere celebrated Messier Objects 1 through 34 to a capacity crowd. Among her roster, she talked about Charles Messier, the trivia behind these grand spectacles (mostly) hidden from the naked eye, along with her own favorites to share during ASTRA's star parties.

She rounded out her presentation with her original composition *The Gentle Astronomer* which is reprinted, with permission, on the following page.

A Note Regarding Image Submissions

ASTRA is fortunate to have so many talented astrophotographers among our ranks. Astral Projections is even more fortunate they are so eager to share their masterpieces in our newsletter.

When submitting images, please send them as large as possible with minimal modifications. I can accept files up to 20 megabytes in size, and it'd be super helpful if the image depth is at least 144 pixels by 144 pixels.

Why? It's nigh-impossible to enlarge an image and make it presentable for publication; pixellation ruins details and detracts from a photograph.

Thank you!

SUBMISSIONS WELCOME

Members are invited to submit articles, photos, news, or stories for inclusion with Astral Projections. Please contact Chris Savia at newsletter@astra-nj.org.

APRIL'S NEWSLETTER DEADLINE: MARCH 25, 2019

The Gentle Astronomer

The splendor and peacefulness of the universe.

Standing in an open field with the Milky Way as
our canopy.

Gazing in awe at items seen many times before.

The fleeting beauty and excitement of a shooting
star.

The dancing of an aurora, or a spectacular sunset.

Gentle, loving people who have much in common

Love of animals and nature

Caring for the wild and always looking up even in
daylight

A genuine spirit of creativity.

What mysteries of the Universe inspire us

What challenges call us

We feed our intellectual and imaginative spirit,

Yet bond with good friends and make new
acquaintances.

People should learn from astronomers

They are friendly, and always willing to share and
are very hospitable.

We teach.

Our imagination soars to unexplained heights,

To what lies beyond and we wonder and
contemplate the Universe.

*An original composition by Rosemarie Spedaliere
after a night at Coyle Field 2003.*

NIGHT SKY NOTES

Springtime Planet Party

by David Prosper

March brings longer days for Northern Hemisphere observers, especially by the time of the equinox. Early risers are treated to the majority of the bright planets dancing in the morning skies, with the Moon passing between them at the beginning and end of the month.

The vernal equinox occurs on March 20, marking the official beginning of spring for the Northern Hemisphere. Our Sun shines equally on the Northern and Southern Hemispheres during the moment of equinox, which is why the March and September equinoxes are the only times of the year when the Earth's north and south poles are simultaneously lit by sunlight. Exacting astronomers will note that the length of day and night on the equinox are not precisely equal; the date when they are closest to equal depends on your latitude, and may occur a few days earlier or later than the equinox itself. One complicating factor is that the Sun isn't a point light source, but a disc. Its edge is refracted by our atmosphere as it rises and sets, which adds several minutes of light to every day. The Sun doesn't neatly wink on and off at sunrise and sunset like a light bulb, and so there isn't a perfect split of day and night on the equinox - but it's very close!

Ruddy Mars still shines in the west after sunset. Mars scoots across the early evening skies from Aries towards Taurus and meets the sparkling Pleiades star cluster by month's end.

March opens with the morning planets of Jupiter, Saturn, and Venus spread out over the southeastern horizon before sunrise. A crescent Moon comes very close to Saturn on the 1st and occults the ringed planet during the daytime. Lucky observers may be able to spot Mercury by the end of the month. March 31 opens with a beautiful set of planets and a crescent Moon strung diagonally across the early morning sky. Start with bright Jupiter, almost due south shortly before dawn. Then slide down and east towards Saturn, prominent but not nearly as bright as Jupiter. Continue east to the Moon, and then towards the beacon that is Venus, its gleam piercing through the early morning light. End with a challenge: can you find elusive Mercury above the eastern horizon? Binoculars may be needed to spot the closest planet to the Sun as it will be low and obscured by dawn's encroaching glow. What a way to close out March!

The morning planets on March 31. Image created with assistance from Stellarium.



CLUB BENEFITS

OBSERVING CALENDAR

March 1 - The moon and Saturn will pass within $0^{\circ}18'$ of each other in the constellation of Sagittarius. Look southeast starting at 3:15 a.m. EST.

March 2 - The moon and Venus will pass within $1^{\circ}12'$ of each other in the constellation of Capricornus. Look southeast starting at 4:33 a.m. EST.

March 6 - New moon at 11:03 p.m. EST.

March 11 - The moon and Mars will pass within $5^{\circ}47'$ of each other in the constellation of Capricornus. Look southwest starting at 7:13 p.m. EDT.

March 20 - Full moon at 9:42 p.m. EDT.

March 20 - Vernal equinox at 5:58 p.m. EDT. Fun fact: Eggs can balance on their ends any time of the year.

March 26 - The moon and Jupiter will pass within $1^{\circ}53'$ of each other in the constellation of Ophiuchus. Look southeast starting at 2:27 a.m. EDT.

March 29 - The moon and Saturn will pass within $0^{\circ}03'(!)$ of each other in the constellation of Sagittarius. Look southeast starting at 3:08 a.m. EDT.

WHY JOIN?

For \$15.00 a year, you can enjoy many benefits with the Astronomical Society of the Toms River Area. Members can borrow of A.S.T.R.A.'s telescopes for observations, have access to private star parties, access to Island Beach State Park permits, in addition to camaraderie with local amateur astronomers. Contact one of our club officers today to join the fun.

ISLAND BEACH STATE PARK PERMITS

One of the perks of being an ASTRA member is the special permit for after-hours stargazing at Island Beach State Park. Please contact the executive board for more details about how you can acquire your 2019 permit.

ASTRA'S TELESCOPES

ASTRA has several different types of telescopes, telescope mounts, along with binoculars, eyepieces, and eyepiece filters available for members to borrow. If any member is interested, please check out ASTRA's website and contact John Endreson at telescope-loan@astra-nj.org, or 609-971-3331.

VOLUNTEER PRESENTERS

Members are invited to give presentations related to astronomy or space science at our monthly meetings. Please contact a club officer to make arrangements.