

# New Braunfels Astronomy Club

Texas, USA

May 21<sup>st</sup>, 2020

249<sup>th</sup> Meeting (Zoom 2)

## Larry's Celestial Calendar & Newsletter

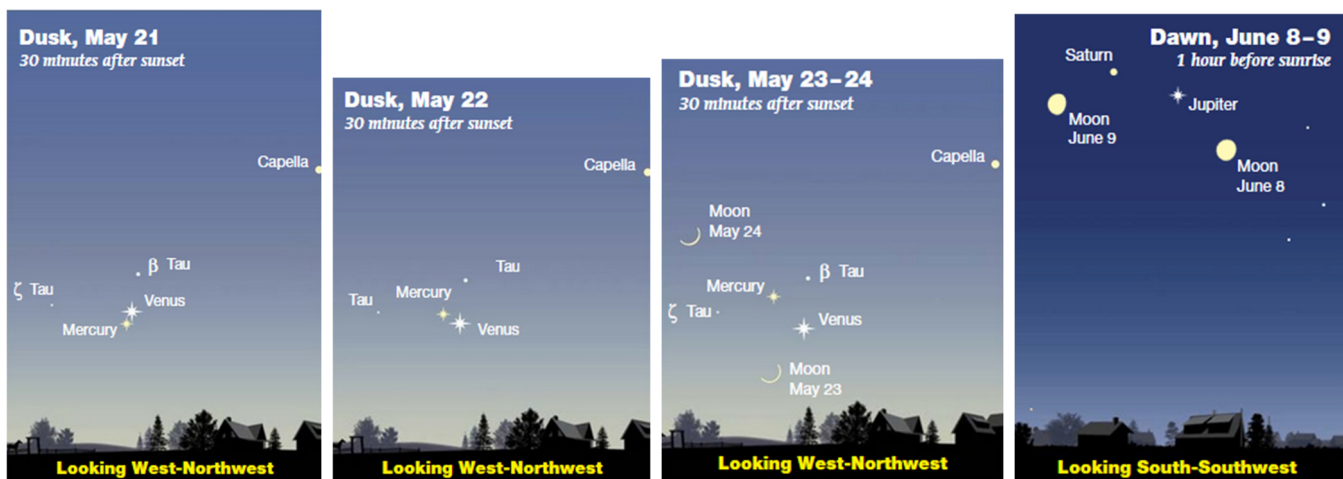
274<sup>th</sup> Edition

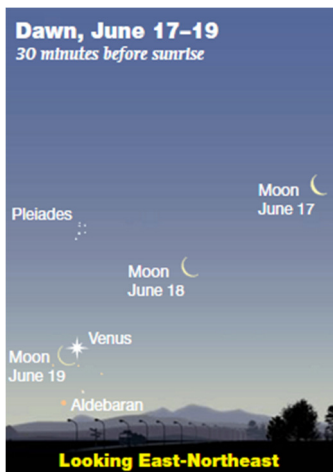
-by Eric Erickson

**Comet PanSTARRS (C/2017 T2) Still Going  
& close to M81/M82 on May 22-23  
Venus & Mercury in Conjunction  
The Moon Tangos with V & M  
Saturn and Jupiter Great Conjunction**

## Observer's Highlight Calendar for Clear Skies

-From Sky and Telescope Magazine





Month Date Time/Direction Event

May	21-24	30 min after sunset/WWN	Venus and Mercury are in conjunction. Catch it early. On the 23 <sup>rd</sup> and 24 <sup>th</sup> a crescent Moon joins them.
May	22-23	Night/NNW	Comet PANSTARRS (C/2017 T2) is less than 1° from galaxies M81/M82. See map for C/2017 T2 below
May	22	12:39pm CDT	New Moon
May	29	10:30pm CDT	First Quarter Moon
June	5	2:12pm CDT	Full Moon
June	13	1:24am CDT	Last Quarter Moon

## Solar System Roundup

- ✚ **Mercury** is shining in the early evening, low above the western horizon
- ✚ **Venus** is in conjunction with Mercury on May 21 and enters inferior conjunction with the Sun on June 5<sup>th</sup>. It returns by June 12<sup>th</sup> as a morning “star”, in the east-northeast.
- ✚ **Earth** still spins, and we are still here to marvel at the wonders of our universe
- ✚ **The Moon** is with Venus in the evening and then morning, Jupiter, Mars, and Saturn in the morning.
- ✚ **Mars** is a morning “star” and its disk getting bigger while it approaches west quadrature
- ✚ **Jupiter** is visible in the SE - early morning hours before sunrise
- ✚ **Saturn** is visible in the SE - early morning hours before sunrise
- ✚ **Uranus** rises at 05:32 and is in Aries
- ✚ **Neptune** is in Aquarius, rising at 03:20
- ✚ **Comet(s)**

- PANSTARRS (C/2017 T2) is around magnitude 9 and should be visible in binoculars at least 50mm, and 4" or larger scopes. It passes within 1° of M81/M82 in Ursa Major on May 22-23. On June 16<sup>th</sup> it is less than 1° from M109.



ISS viewing for New Braunfels (works for Canyon Lake too).

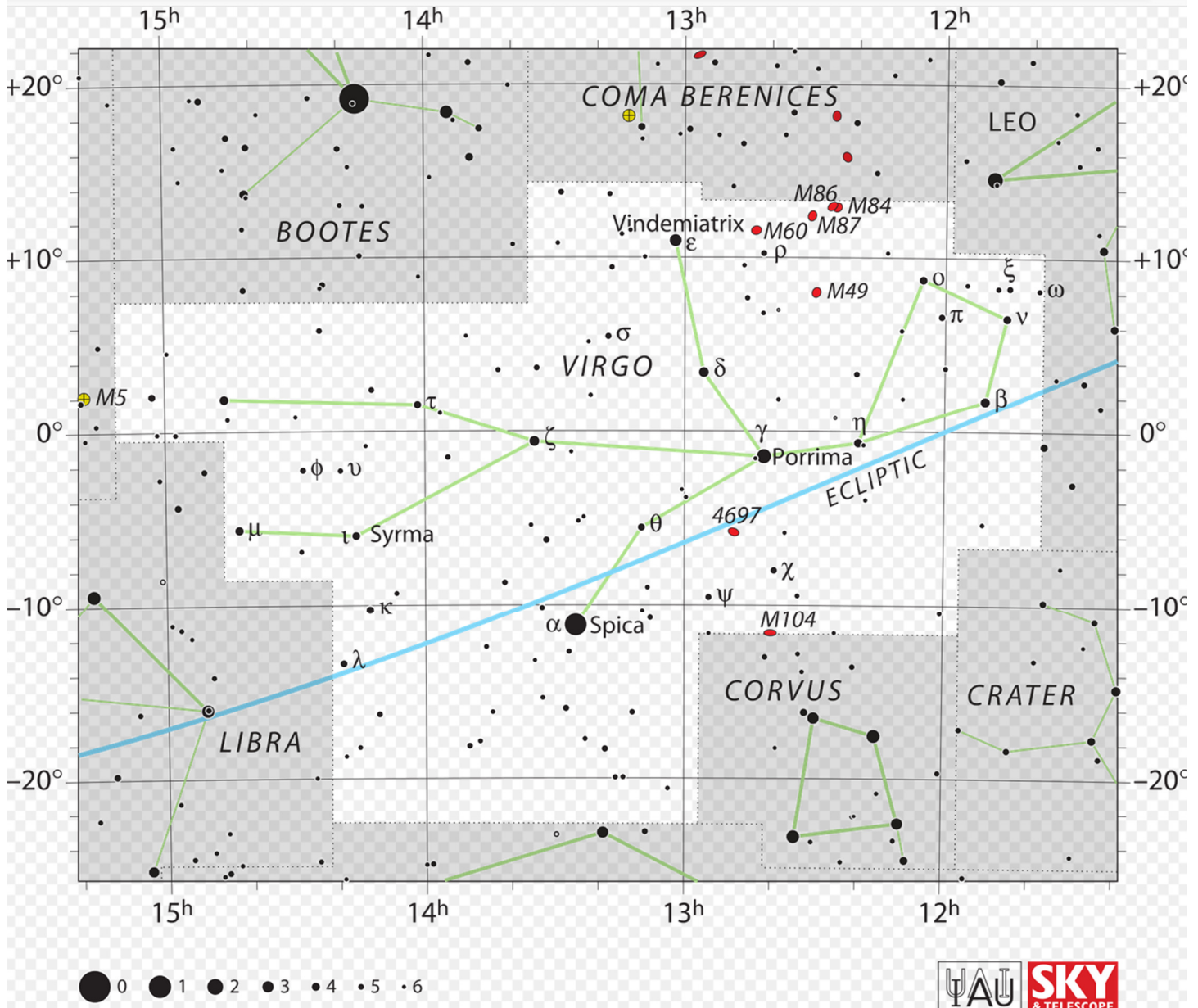
▪ From [Heavens Above.06](#)

Date	Start Time	Start Loc	Max Alt °	Travel Toward	Note
06/04	21:37	NW	47	ESE	Passes close to M13 in Hercules – use binoculars to follow or telescope at low power to get M13. Looks like it will pass to the WSW
06/06	21:37	NW	39	SSE	

# My Observing Pick: Virgo

A beauty like no other. What could be more beautiful than a virgin in a furrow, holding an ear of corn and scales of justice? Virgo is a mixtape of genres, from Babylonian, Greek, and Roman culture. They all revered grain, purity, fertility, and justice. Today's Virgo has been split from Libra so no more scales of justice. Spica, Virgo's brightest star is Latin for "ear of grain".

Beside Spica the valuable views include M104 (Sombrero galaxy), NGC 4697 (Spiral galaxy), and the ever-popular Virgo Cluster that slides into Coma Berenices as well.



# Conjunctions

We have been blessed of late. Our early morning sky has a Great Conjunction of Jupiter and Saturn, with Mars to their east – it's been going on for over a month and will continue for a while. Next up, Venus and Mercury together in the evening sky. And the Moon... when the Moon gets in the act it just makes these conjunctions spectacular! A conjunction occurs when two or more celestial objects, even spacecraft, appear to be close in the same area of sky relative to the viewer.

Conjunctions have different meanings in astrology depending on the objects involved. They can get a bad rap however by those who focus on 'bad omens' or just want to profit from the hype.

The implied significance of conjunctions developed from practitioners of astrology in ancient Babylonia. They "read" celestial events such as planetary movements within certain constellations and relative to the Sun or Moon. They also interpreted these events, making predictions of good or bad events. The conjunction of Venus and a crescent Moon was especially significant, a particularly good omen.

Conjunctions are events that make you sit up and notice the sky, because when they involve planets and the Moon, they make a bright shining spectacle. Sometimes the spectacle is so impressive law enforcement gets a bunch of calls claiming UFO sightings.

Inferior or superior conjunction: Mercury and Venus can each be at inferior or superior conjunction due to their orbits being closer to the Sun than Earth's. Each is between Earth and the Sun during an inferior conjunction and the Sun is between during a superior conjunction. Either way they cannot be seen during their conjunctions.

Conjunction is the general term for objects that appear in the same part of the sky. They will be lost in the Sun's glare if in conjunction with the Sun. A Moon-Sun conjunction is called a New Moon when the Moon is between Earth and Sun, or Full Moon when at opposition (Earth is between Sun and Moon).

Syzygy: When three or more objects are in a straight-line formation. What a cool sight!

Occultation, Transit, Eclipse: These all refer to a conjunction where one object passes in front of another from our perspective. Occultation means one object completely obscures the other (for example the Moon occulting a planet or star). Transit means a smaller appearing object passing in front of the larger (the recent Mercury-Sun transit). Eclipse is an occultation of the Sun by the Moon (solar eclipse) or Earth (lunar eclipse).

Eric Erickson

## Coming up: OUR 250<sup>th</sup> ASTRONOMY CLUB MEETING

**June 18<sup>th</sup> 2020**, from 7 – 9:00 p.m.

**ZOOM meeting**

New Braunfels Astronomy Club



*Astronomy Friends New Braunfels*



*Comal County Friends of the Night Sky*

Mick Homer-First Contact

[astronomynbtx.org](http://astronomynbtx.org)

<https://www.facebook.com/groups/354953995432792/>

<https://www.facebook.com/groups/166098014710276/>

[mhomer2012@yahoo.com](mailto:mhomer2012@yahoo.com)

# New Braunfels Astronomy Club Meeting

Date:

## Agenda

- Open meeting and introduce new members
- Interesting observations, experiences
- Show and tell
- What's in our sky this month? [Newsletter and Abrams Sky Calendars](#)
- What's going on – events, outreach
  - Comal County Friends of the Night Sky – Larry Wells, Tracy Byrne, and Eric Erickson are members. It's open to anyone. Please join.
- Main feature(s)
- Open for discussion
- Feedback and close the meeting