

## Highlights of the March Sky...

--- 2<sup>nd</sup> ---

AM: A waxing gibbous Moon leads Leo's bright star Regulus by less than 2° before sunrise.

--- 3<sup>rd</sup> ---

AM: **TOTAL LUNAR ECLIPSE.** Maximum eclipse is at 6:34 am EDT. Full Moon @ 6:38 am EST

--- 6<sup>th</sup> ---

AM: A waning gibbous Moon is about 3½° to the lower right of Virgo's brightest star Spica.

--- 8<sup>th</sup> ---

DAYLIGHT-SAVING TIME begins for most of the U.S. at 2am.

--- 10<sup>th</sup> ---

DAWN: The Moon is less than 1½° to the lower right of Scorpius' red supergiant star Antares.

--- 11<sup>th</sup> ---

Last Quarter Moon @ 5:39 am EDT

--- 18<sup>th</sup> ---

New Moon @ 9:23 pm EDT

--- 20<sup>th</sup> ---

EQUINOX: Spring begins in Northern Hemisphere at 10:46 am EDT.

DUSK: Venus is about 8½° to the lower left of a razor-then waxing crescent Moon.

--- 22<sup>nd</sup> ---

PM: The crescent Moon is about 5½° to the lower right of the Pleiades, with that gap decreasing as they set in the west-northwest.

--- 25<sup>th</sup> ---

First Quarter Moon @ 3:18 pm EST

PM: The Moon is about 6½° to the lower right of Jupiter.

--- 29<sup>th</sup> ---

DUSK: A waxing gibbous Moon trails Regulus by 3°.

# Prime Focus

A Publication of the Kalamazoo Astronomical Society

★ ★ ★ March 2026 ★ ★ ★

## This Month's KAS Events

**General Meeting: Friday, March 6 @ 7:00 pm**  
*Kalamazoo Area Math & Science Center • See Page 10 for Details*

**Lecture Series: Saturday, March 14 @ 1:00 pm**  
*Held on Zoom • [Click to Register](#) • See Page 4 for Details*

**Astrophoto Seminar: Friday, March 20 @ 8:00 pm**  
*Held on Zoom • [Click to Register](#) • See Page 6 for Details*

**Member Observing: Saturday, March 21 @ 7:00 pm**  
*Messier Marathon • [Visit Schedule Page for Details](#)*

## Inside the Newsletter...

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One of the highlights of 2025 was the total lunar eclipse on March 14<sup>th</sup> (Pi Day). We were extremely fortunate to have clear skies for the event's entirety. Why not try it again for this year's total lunar eclipse? Look at the times listed in the graphic below. Totality doesn't start until 6:04 am on a Tuesday, and the Moon will only be 12.4° above the western horizon. Plus, the weather forecast for Tuesday morning looks rotten. Hopefully clouds will part enough to get at least a look. If you also are able to snap off a few shots, please bring them to share at the general meeting on March 6<sup>th</sup>.

And yes, you should absolutely plan to attend the March General Meeting. Our special guest speaker will be Michael Meyer, a professor and the current chair of the Department of Astronomy at the University of Michigan. This time, unlike our last two special guest speakers, Professor Meyer will be joining us LIVE at the Kalamazoo Area Mathematics & Science Center. If Professor Meyer is able to travel from Ann Arbor, I believe most of you will be able to join us in person in Kalamazoo. After all, Professor Meyer will be our first in-person guest speaker since May of last year.

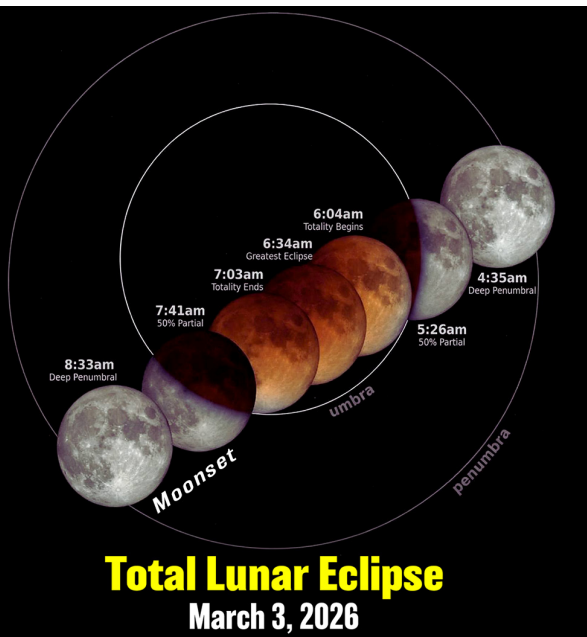
Professor Meyer will give a talk on the 39-meter Extremely Large Telescope (ELT), which is currently under construction on top of Cerro Armazones in the Atacama Desert of northern Chile.

When it has its first light in 2029, the ELT could begin to change everything we know about the universe—including how the first galaxies were created and where life on other planets may exist. The University of Michigan is the only American university involved in helping develop it. When it is completed, it will be the world's largest optical and near-infrared telescope.

But there's more! We have one more special guest presenter this month. Trevor Jones, the creator of

the astrophotography-themed website and highly popular YouTube channel, *AstroBackyard*, will join us for a two-hour online astrophotography tutorial on Friday, March 20<sup>th</sup>, beginning at 8:00 pm. Part 1 will cover how to effectively use ZWO's ASIAIR to control an astrophotography setup. These little Raspberry Pi-based computers have revolutionized astrophotography. They give you the ability to replace a laptop at the telescope and eliminate the need for additional software, USB hubs, power supplies, and a Wi-Fi router. Several members have requested a workshop on the ASIAIR, so your wish is my command. In Part 2, Trevor will share his proven Adobe Photoshop workflow for processing deep-sky images. Of course, Photoshop doesn't require an introduction, but both novices and experts will undoubtedly gain knowledge from Trevor's tutorial.

Trevor founded *AstroBackyard* in 2016. Today, it has over 527,000 subscribers, and his videos have nearly 67 million views. He's done a lot for the amateur astronomy community, and it'll be a pleasure to have him join us on Zoom. His topics might not be for a general audience, but you'll appreciate his passion for our hobby. This will be the first of three astrophotography workshops we will hold this year in honor of our 90th anniversary. Join us!



## KAS Board of Directors

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# February Meeting Minutes



The Kalamazoo Astronomical Society's 90th anniversary celebration continued on Friday, February 6<sup>th</sup>. KAS President Richard Bell commenced the general meeting at 7:08 pm EST. An estimated 34 members and guests were present at the Kalamazoo Area Math & Science Center, while approximately 65 people joined us via Zoom.

Our special guest speaker for the evening was Professor Christopher Stubbs, a professor of physics and of astronomy at Harvard University. The title of his presentation was *The Vera C. Rubin Observatory: A New Eye Opens on the Universe*.

Professor Stubbs opened by saying the goal of the Vera Rubin Observatory is to repeatedly scan the sky for 10 years using the largest digital camera ever made to create an ultra-wide, ultra-high-definition, time-lapse record of our universe.

Originally called the Large Synoptic Survey Telescope, it was renamed in December 2019 to honor the American astronomer Vera Rubin. Vera Rubin was a pioneer in studying galaxy rotation rates, providing compelling evidence for the existence of dark matter. The Rubin Observatory will not only investigate this mysterious, invisible form of matter but will also enhance our understanding of dark energy, the unknown, uniform, and repulsive force that drives the acceleration of the universe's expansion.

Other goals for the observatory include mapping the structure of the Milky Way Galaxy and learning more about its formation. Rubin will take a census of the solar system, discovering millions of new asteroids and comets and so much more. Lastly, Rubin will bring the night sky to life, yielding a treasure trove of discoveries.

The observatory is located on the summit of Cerro Pachón, a 2,682-meter (8,799 ft) mountain in the Coquimbo Region of northern Chile. Situated in the Andes mountains near La Serena, this site was selected for its exceptional seeing conditions, high number of clear nights, and low light pollution.

Professor Stubbs then took us on a colorful illustrated tour of La Serena, a coastal city he highly recommended visiting. The city boasts many excellent seafood restaurants, as well as the desert region surrounding the observatory. The observatory itself is located a two-hour drive further inland along Route 41.

The three enabling technologies for this project are large precision optics, sensitive digital detectors, and data processing and dissemination.

The telescope's primary mirror has an aperture of 8.4 meters with a focal ratio of  $f/1.234$ . It uses a three-mirror anastigmat, which helps this system to cancel astigmatism by employing three nonspherical mirrors, resulting in sharp images over a wide field of view.

The telescope is equipped with the largest digital camera ever built. It boasts a 3.2-gigapixel CCD sensor. The camera is roughly the size of a small car and weighs almost 6,200 pounds. The camera is equipped with a correcting lens, which itself is 5 feet in diameter. It is the largest precision refractive optic ever built. Each 30-second image taken by the camera covers an area of the sky as big as 45 full moons.

During its ten-year survey, Rubin will cover the entire visible Southern sky every three to four nights and generate approximately 20 terabytes of data each night, along with an additional 15 petabyte catalog database. In 10 years, Rubin data processing will generate around 500 petabytes, and the final dataset will contain billions of objects with trillions of measurements.

Prof. Stubbs recounted past all-sky surveys using the galaxy group NGC 4410 in Virgo as a comparison. These include the Palomar 48-inch Schmidt telescope that reached 21st magnitude (digitized in 1994). The Sloan Digital Sky Survey reached 22nd magnitude in 2000. Pan-STARRS, in Hawaii, reached 23rd magnitude in 2010. In 2025, Rubin's first look at NGC 4410 reached 30th magnitude (4000 times fainter than the Palomar survey) and gave a considerably cleaner image.

Prof. Stubbs noted that during the observatory's initial 10-hour test, it discovered 2,104 never-before-seen asteroids in our solar system.

The number of Type Ia supernova discoveries should increase exponentially thanks to Rubin's sky survey. This, along with their meticulous calibration process, will greatly enhance our understanding of the universe's accelerating rate of expansion.

In conclusion, Prof. Stubbs invited amateur astronomers like us to join the [Rubin Comet Catchers](#) program.

Thanks to Philip Wareham for providing snacks during the break. Tim Kurtz volunteered to bring snacks to the March meeting.

Richard announced in his President's Report that he will send the fourth and final membership renewal mailing



next week. The membership roster will be purged on March 7<sup>th</sup>.

Pete Mumbower, Scott Macfarlane, and Scott's brother will all be joining Richard at the Northeast Astronomy Forum on April 11<sup>th</sup> and 12<sup>th</sup> in Suffern, New York. Pete is also attending the Northeast Astro-Imaging Conference on April 9<sup>th</sup> and 10<sup>th</sup>.

Jim Bradshaw, Jack Price, Don Stilwell, and Dave Woolf have all volunteered to represent the KAS during the Hastings Public Library's Science Night on February 18<sup>th</sup>. They'll be helping attendees make their own planispheres.

Finally, volunteers are needed for the Rock, Gem, Mineral & Fossil Show on May 2<sup>nd</sup> and 3<sup>rd</sup>. There will be two shifts inside the Expo Center. On May 2<sup>nd</sup>, the shifts will be from 10am to 2pm and 2pm to 6pm. On May 3<sup>rd</sup>, it will be from 10am to 1:30 pm and 1:30 pm to 5pm. Weather permitting, we will also offer solar viewing from 12pm to 4pm

on both days. A sign-up sheet was passed around. It will also be brought to the March and April meetings.

Due to the persistent winter cloud cover, there were no observing reports to speak of.

In astronomical news, NASA has pushed back the Artemis II launch date to sometime in April. It is currently scheduled to be a crewed mission to orbit the Moon. If the mission does go forward, there was talk of having a launch party to watch it together.

Richard said that his opinion since his presentation last September has not changed and that he still does not believe we are heading back, especially considering that he has heard whispers that there are safety concerns with the mission.

Jack Price said that the International Dark-Sky Association is asking people to [sign a letter](#) they are sending to the company Orbital Reflector about the

multitude of reasons why placing reflectors in orbit is such a terrible idea.

Upcoming events include the first board meeting of the year on February 8<sup>th</sup>. Parts 3 and 4 of the *Introduction to Amateur Astronomy* series will be held on February 14<sup>th</sup> and 28<sup>th</sup>, respectively. The last Online Viewing Session of the season is also scheduled for February 14<sup>th</sup>. It will be a special Valentine Day-themed session with looks at the Heart and Rosette Nebulae. If skies are clear on February 20<sup>th</sup>, we will hold our annual Freeze Out at the Nature Center.

The meeting concluded at 8:36 pm, following a preview of our special guest speaker on March 6<sup>th</sup>.



The featured talk can be viewed in its entirety on our YouTube Channel.

# *Introduction to* **AMATEUR ASTRONOMY**

The five-part lecture series designed to help you become a star-hopping skymaster concludes this month! Participants who attend ALL FIVE parts and sign in as instructed will receive a Certificate of Completion. [Please register](#) if you haven't done so already. Here is the final topic:



Astrophotography is the art of photographing the night sky. Over the past three decades, astrophotography has undergone a revolution as digital cameras have surpassed film cameras. In some ways the transition has made the field more technical, but in many ways shooting the sky is easier than ever! We'll start with the basics, like using a stationary photographic tripod, and work our way up to imaging with dedicated astronomical cameras. Constellation patterns, the Milky Way, the night-to-night motion of the planets, bright comets, northern lights, and perhaps a meteor all await you.

## *Held Exclusively on Zoom*



Visit the *Introduction to Amateur Astronomy* [web page](#) for more information on the entire series.

# Board Meeting Minutes



The KAS board met for its first meeting of 2026 on Sunday, February 8<sup>th</sup>, at 5:00 pm at Sunnyside Church. KAS President Richard Bell brought the meeting to order at 5:02 pm. All other board members were in attendance. These include Matt Borton, Jack Price, Scott Macfarlane, Pete Mumbower, Don Stilwell, Philip Wareham, and Dave Woolf. Also in attendance was member Jim Bradshaw. After approving the agenda, Don proceeded with the treasurer's report.

The total account balance for January 2026 stood at \$50,376.83. The account breakdowns as of January 31<sup>st</sup>, 2026, are as follows: The Advia 14-month CD is at \$10,515.79, while the Advia 7-month CD is at \$10,444.22. The savings account is at \$17,026.65, followed by the checking account with \$3,246.00. The Owl Observatory Maintenance Fund is at \$2,894.88, with the Remote Telescope Fund at \$857.39. The PayPal account is currently at \$5,058.40. The savings account is at \$155.50, and cash on hand totals \$178.00. The cash flow for January was \$1,492.73.

Don then brought up that both CDs are coming due on February 11<sup>th</sup>, and the board then discussed the different options we have to put the money in that Don and Matt brought up. The board decided that the best path forward would be to have Don check with Advia Bank to see if we can roll over the \$20,960.00 into two separate 14-month CDs to give us a little more flexibility of drawing a portion of the money out if needed without paying the interest penalty. If Advia will not allow Don to split the CDs into 2 CDs of \$10,480.00 each, it was agreed that Don should put the entire \$20,960.00 into a single 14-month CD. Richard motioned for a vote to give Don authorization to move the money into a new 14-month CD or CDs; Jack seconded the motion, with the board unanimously approving it. Don then delved into the specifics of the tax forms our non-profit status permits him to utilize.

We then covered upcoming activities between now and the next board meeting in May. We will hold the remaining three parts of Introduction to

*Amateur Astronomy* on February 14<sup>th</sup>, February 28<sup>th</sup>, and March 14<sup>th</sup>. The final Online Viewing Session of the season will also be held on February 14<sup>th</sup>. The annual February Freeze Out at the Kalamazoo Nature Center will be on Friday, February 20<sup>th</sup>, at 8:00 pm, if skies are clear.

The general meeting on March 6<sup>th</sup> will feature a presentation on the Extremely Large Telescope by University of Michigan professor Michael Meyer. Trevor Jones, creator of the popular YouTube channel *AstroBackyard*, will conduct a two-part astrophotography workshop on Friday, March 20<sup>th</sup>, at 8:00 pm. Richland Township Park will host our annual Messier Marathon on Saturday, March 21<sup>st</sup>, at 7:00 pm (weather permitting).

The general meeting on April 3<sup>rd</sup> will feature MSU emeritus professor Michael Velbel. Public Observing Sessions return on April 4<sup>th</sup> and continue on April 18<sup>th</sup>. Pete Mumbower will conduct a workshop on PixInsight on Friday, April 17<sup>th</sup>, at 8:00 pm. Due to a concert in Chenery Auditorium on May 1<sup>st</sup>, the general meeting has been moved to WMU's Rood Hall (room 1104). Our very special guest will be famed comet hunter Dr. David Levy!

We discussed the proposed trip to Adler Planetarium as a follow-up item from the previous board meeting. We reviewed the itinerary from our last field trip there in November 2007. We decided on Saturday, June 13<sup>th</sup> for the next Adler field trip. We will duplicate the itinerary used last time.

We briefly discussed the revisions that the board requested Pete to make to the Purchasing Agreement for the PlaneWave CDK20, based on Becky Csia's recommendations, between the society and member Tim Kurtz.

Moving onto new business, we discussed if Flesher Field should again host the Perseid Potluck Picnic in 2026. One other possibility was Oshtemo Township Park. It was decided that Flesher Field was the better location for solar viewing, so we will return there on August 1<sup>st</sup>.

Matt Borton recently suggested we

have some business cards printed. Richard could pass them out to vendors during his upcoming visit to NEAF and inquire about holding a similar event in Kalamazoo. After a brief discussion, Don made a motion to approve the purchase of 500 business cards, with Dave seconding him. The board unanimously approved the purchase.

We then discussed the recent break-in at the Kalamazoo Storage Center and the theft of several items from our storage unit. Our next step is to take an inventory and determine all that is missing in value. Don will file a claim with the storage center.

Our final topic was upgrades to the KAS Remote Telescope (RT). The RT computer is over 10 years old and is running on the now unsupported Windows 10 operating system. Original estimates for a new computer about a year ago were \$2,900. A severe, AI-driven global memory shortage in 2026 has doubled prices for manufacturers compared to 2025. After the board discussed the options available, Scott motioned for a vote to approve a budget of \$5,000.00 for a new RT computer, with Matt seconding the motion. The board unanimously approved the purchase.

The retirement of its developer has rendered ACP, the software that runs the RT, no longer supported. Voyager Automation Software seems to be the only viable replacement. Its initial cost is about \$900, but the annual subscription fee is much less than it was for ACP. A custom version of the software optimized for our observatory with multiple user profiles and login credentials will be purchased once the new computer has been received. A new product, the WandererAstro Electronic Tilt Adjuster, may help solve the remaining issues with the Takahashi FSQ-106EDX3. It costs \$849. The board discussed the tilt adjuster and agreed that it would be worthwhile to purchase. Jack motioned for the vote, with Philip seconding it. The board approved the purchase unanimously.

The meeting adjourned at 6:38 pm. The spring board meeting will be on May 17<sup>th</sup> at 5:00 pm, likely on Zoom.

# Online Astrophotography Tutorial

with Trevor Jones

Join [AstroBackyard](#) creator Trevor Jones for a live, in-depth astrophotography workshop split into two focused sessions designed to help you capture and process better deep-sky images from start to finish.



## Part 1: ASI AIR Tutorial

Learn how to confidently use ZWO's ASI AIR to control your astrophotography setup. Trevor will walk through real-world workflows, including polar alignment, plate solving, guiding basics, camera and filter settings, sequencing, and practical tips for a smooth night under the stars. Ideal for beginners and anyone looking to get more out of their ASI AIR.

## Part 2: Photoshop Deep-Sky Processing Tutorial

Discover Trevor's proven Photoshop workflow for processing deep-sky images. This session covers calibration concepts, stretching techniques, color balance, noise reduction, star control, and bringing out faint nebula and galaxy detail - using tools and methods you can apply immediately to your own data. Whether you're just getting started or looking to refine your technique, this live session will provide clear explanations, practical demonstrations, and real astrophotography insight from years of backyard imaging experience.



### — About the Presenter —

Trevor Jones is the founder of [AstroBackyard](#) and an award-winning astrophotographer from Ontario, Canada. With over 15 years of experience, Trevor is dedicated to helping beginners learn astrophotography through practical, real-world guidance built on years of hands-on experience under the night sky. Through [AstroBackyard](#), he reaches a global audience with approachable tutorials, gear insights, and inspiring images. Known for his enthusiasm and friendly teaching style, Trevor makes astrophotography fun, exciting, and accessible for anyone eager to capture the wonders of the universe.

## Friday, March 20<sup>th</sup> @ 8:00 pm EDT

Held Exclusively on Zoom • [Click to Register](#)

# Remote Telescope

## User Update

by Tim Kurtz

As I've become more adept at using the Kalamazoo Astronomical Society [Remote Telescope](#), I wanted to share some more about my experience and some tips for other users. As of this writing, I have collected nearly 200 hours of data, and sometimes there were issues.

The first recommendation is to have a plan for targets. I downloaded [Stellarium](#) so that I can easily see what objects may be up on a given night. In order to make this work, there are a few settings that need to be changed. In the 'Location' window, the latitude and longitude (N 31° 34' 8", W 109° 7' 15") of the observatory need to be entered as well as the elevation (1370m) and time zone. This allows Stellarium to properly project the night sky as seen from Arizona Sky Village (ASV). Next, in the 'View' window, on the DSO tab, select the object types to be displayed. When navigating the night sky in the software, the user will be able to easily see the different potential targets based on the icons for each (planetary nebula, open clusters, galaxies, etc.). Making this all come together, open the setup menu for the 'Oculars' to enter data for the telescopes and cameras on the RT. First, click on the 'Sensors' tab and then click the 'Add' button to enter a new sensor. I named mine SBIG STX-16803 to differentiate it from my personal cameras. Then, enter the 'Resolution' data for X and Y as 4096 pixels and 'Chip Width' and 'Chip Height' as 37mm.

On the 'Telescope' tab, enter the information for the PlaneWave CDK20 (focal length 3454mm and diameter 508mm) and the Takahashi FSQ-160EDX3 (focal length 530mm and diameter 106mm). Once these steps are completed, open the 'Configuration' window, select the Main tab, and click 'Save Settings.' I had to learn the hard way it is a necessary step.

Now that the information about the RT is loaded into Stellarium, it's easy to scroll around the sky and frame targets. By clicking the 'Sensor' button in the 'Oculars' window, a red box will appear, showing the field of view of the given telescope and camera combo. Swapping between options is easy using the arrows in the sensor menu. To create a plan, I set the date and time for when my telescope reservation begins and select the telescope I intend to use. Next, I scroll to find my target and make sure it is higher than 20° altitude—this is a hard limit on the telescope due to the height of the observatory walls. Typically, I find something that is on the east side of the meridian to maximize imaging time as an object transits the sky. It is also possible to image on the west, always making sure the object is higher than 20°. Controls are available at the bottom to manage the passage of time, making it easy to estimate how much time remains before the target moves out of the telescope's range.

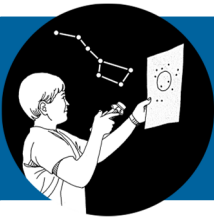
Another consideration is the lunar phase and the Moon rise and set times. I typically select targets on the opposite side of the sky from the Moon to minimize signal loss. Also, if avoiding the Moon is impossible due to how it transits during a particular night, I focus on capturing data with filters that are less affected by moonlight—H $\alpha$  and SII. Collecting broadband data (LRGB) might be ok as well, but again, try to stay opposite the Moon. On nights where the Moon rises partway through the night, I will collect data on multiple targets in an attempt to work around the Moon.

The last recommendation is to pay close attention to the weather. The KAS [Piishi All-Sky Camera page](#) on our website has some weather data and information from the Clear Sky Chart. This will have predicted cloud cover and seeing/transparency conditions at the ASV. I also utilize the Astrospheric app on my phone as an additional source of weather information. But don't rely on these completely; be sure to check the cloud cover from the satellite imagery and see how they are moving. Planning a whole night, requesting a specific time, and finding yourself completely clouded out is not fun.

I hope to see some more users on the schedule and some of your images in October during Astrophotography Night 2026!



Tim Kurtz with the KAS Remote Telescope.



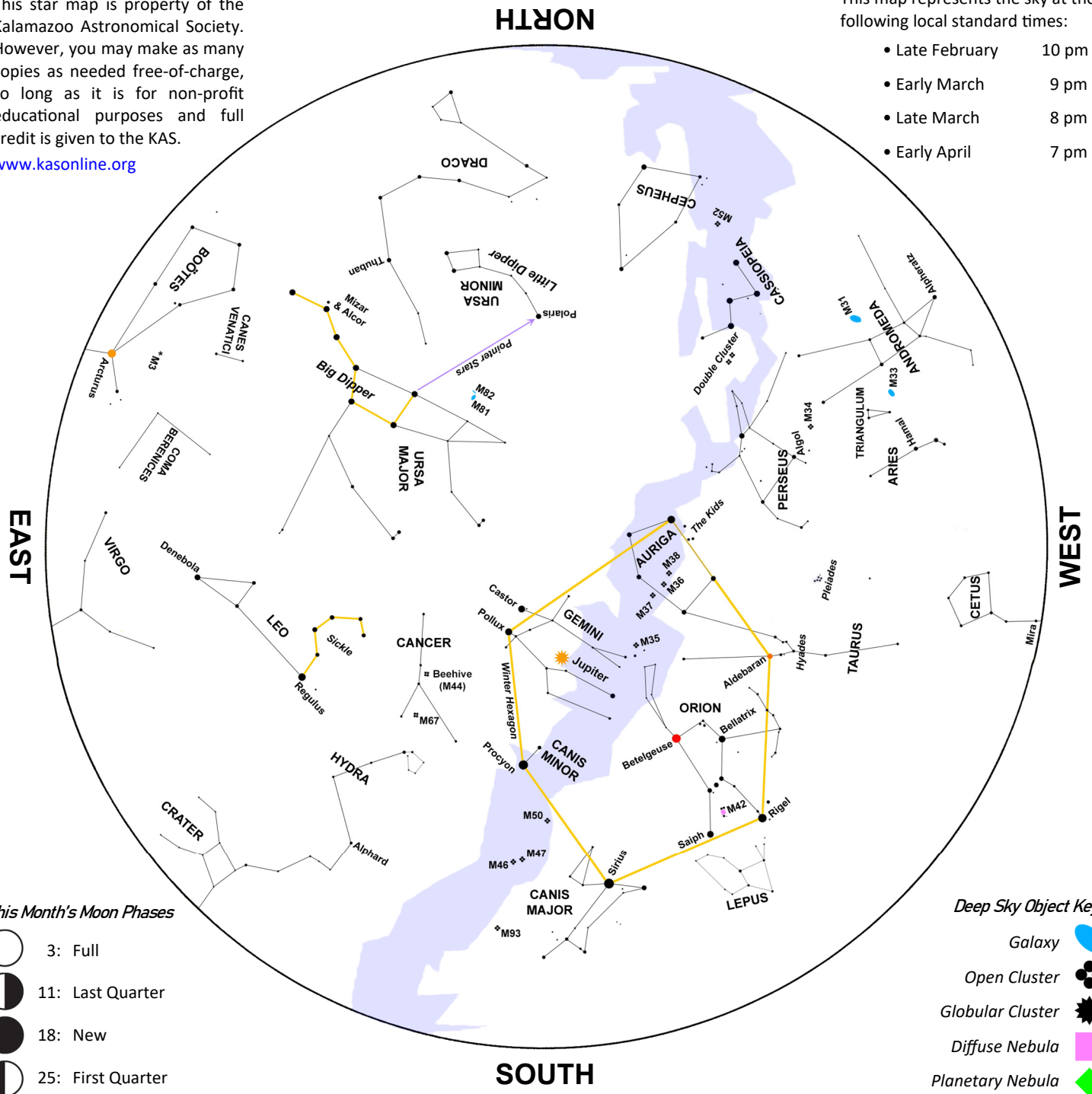
# March Night Sky

This star map is property of the Kalamazoo Astronomical Society. However, you may make as many copies as needed free-of-charge, so long as it is for non-profit educational purposes and full credit is given to the KAS.





[www.kasonline.org](http://www.kasonline.org)

This map represents the sky at the following local standard times:






- Late February 10 pm
- Early March 9 pm
- Late March 8 pm
- Early April 7 pm



### This Month's Moon Phases

-  3: Full
-  11: Last Quarter
-  18: New
-  25: First Quarter

### Deep Sky Object Key

-  Galaxy
-  Open Cluster
-  Globular Cluster
-  Diffuse Nebula
-  Planetary Nebula

A total lunar eclipse will take place in the morning hours of March 3<sup>rd</sup>. The most captivating part of the eclipse starts at 4:50 am EST, when the Moon begins to enter Earth's umbra. Observe as Earth's dark, curved shadow elegantly moves across the Moon's face, beginning from the northwest (upper left) section of the disk. You should notice the eclipsed portion of the

Moon turning a coppery red hue when it is about halfway into the umbral stage. Totality begins at 6:04 am and lasts for 58 minutes. Maximum eclipse occurs at 6:34 am, during which the northern half of the Moon appears slightly darker than the southern portion. Totality ends at 7:03 am, and approximately 18 minutes later, the Moon will set while the final stages of the eclipse are still in progress.

Early risers will get another treat on March 10<sup>th</sup>. A nearly last-quarter Moon will be less than 1½° to the lower right of Antares.

On the evening of March 20<sup>th</sup>, a razor-thin waxing crescent Moon will be about 8° to the upper right of Venus low in the western sky. The crescent Moon will also visit the Pleiades on March 22<sup>nd</sup>, sitting some 5½° to the lower right of the famed star cluster.

**CONTRIBUTE**  
to **Prime Focus**

Reviews · Reports · Astrophotos

Deadline for submissions is **15<sup>th</sup> of EVERY MONTH.**  
The quality of this newsletter depends on **YOU!**

**Messier Marathon**

Bring binoculars or a telescope and participate in this one-night race across the sky.

**Saturday, March 21<sup>st</sup> @ 7:00 pm**  
Richland Township Park • 6996 N 32nd St.

MOVING? NEW EMAIL?



Let Us Know!

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**Sky-Watcher**  
Flextube 200P Collapsible Dobsonian

**Available for Loan!**

A KAS 90<sup>th</sup> Anniversary Special Event

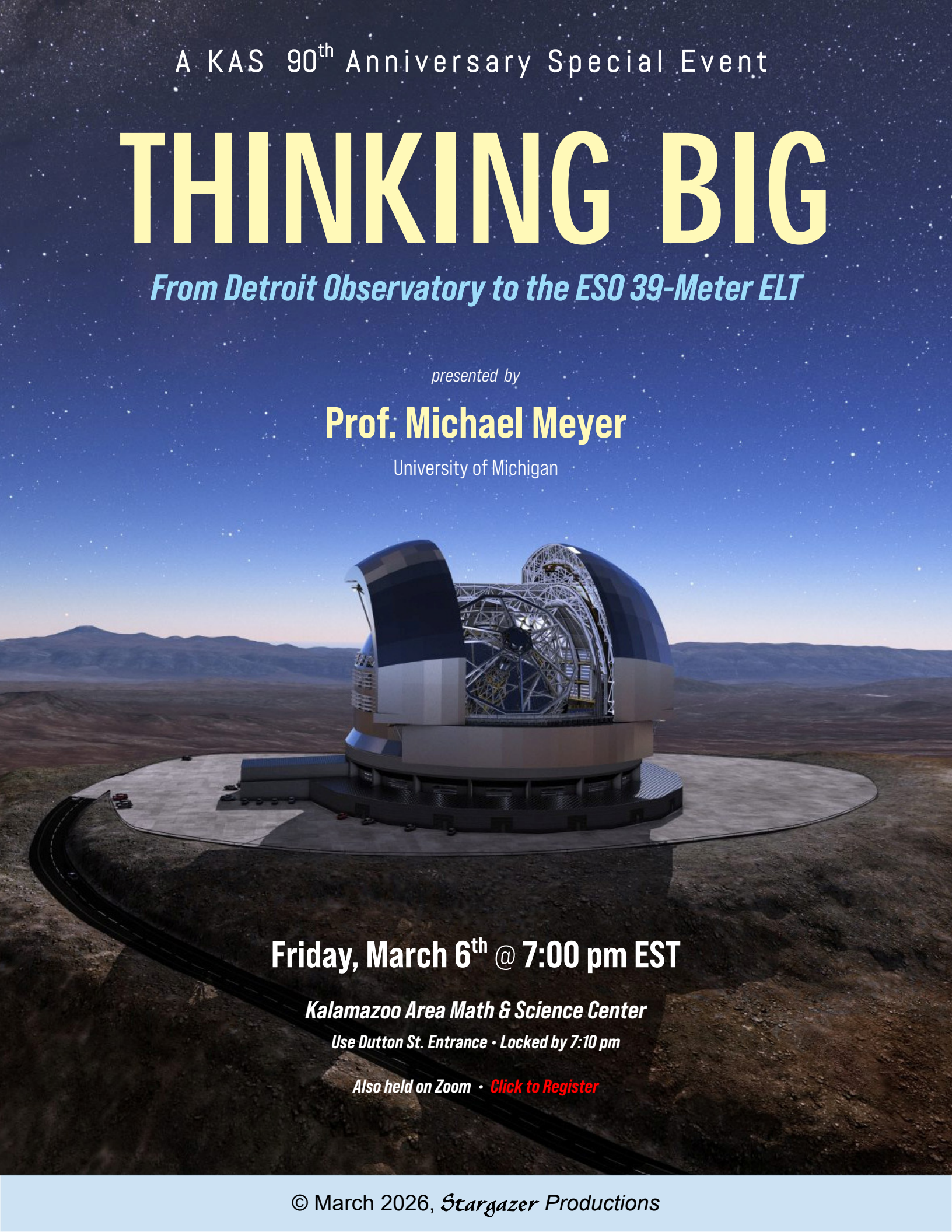
# THINKING BIG

*From Detroit Observatory to the ESO 39-Meter ELT*

*presented by*

**Prof. Michael Meyer**

University of Michigan



**Friday, March 6<sup>th</sup> @ 7:00 pm EST**

***Kalamazoo Area Math & Science Center***

***Use Dutton St. Entrance • Locked by 7:10 pm***

***Also held on Zoom • [Click to Register](#)***