

Highlights of the April Sky...

--- 1st ---

Full Moon @ 10:12 pm EDT

--- 2nd ---

PM: The Moon is 2° to the lower right of Spica when they rise in the east-southeast.

--- 6th ---

DAWN: A waning gibbous Moon is about 4½° to the lower right of Antares in Scorpius before sunrise.

--- 10th ---

Last Quarter Moon @ 12:52 am EDT

--- 17th ---

New Moon @ 7:52 am EDT

--- 18th ---

DUSK: The thinnest sliver of a waxing crescent Moon is located 6° to the lower left of Venus.

--- 19th ---

DUSK: The crescent Moon is positioned approximately 4½° above the Pleiades cluster, while Venus is located about 6½° below it.

--- 22nd ---

AM: The Lyrid meteor shower peaks. Expect a local hourly rate of 18 meteors per hour.

DUSK: The Moon, located in Gemini, is approximately 6° below Pollux, and Jupiter is positioned about 3° to the lower left of the Moon.

--- 23rd ---

DUSK: Venus is around 3½° to the lower left of the Pleiades.

First Quarter Moon @ 10:32 pm EDT

--- 25th ---

DUSK: A waxing gibbous Moon occults Regulus at 8:20 pm EDT. The star dramatically reappears at 9:10 pm.

--- 29th ---

PM: The Moon is located just over 3° to the upper right of Spica.

Prime Focus

A Publication of the Kalamazoo Astronomical Society

★ ★ ★ April 2026 ★ ★ ★

This Month's Events

General Meeting: Friday, April 3 @ 7:00 pm
Kalamazoo Area Math & Science Center • See Page 12 for Details

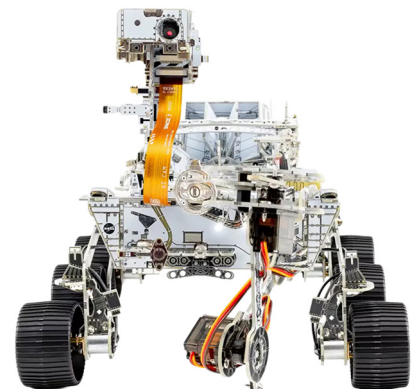
Observing Session: Saturday, April 4 @ 8:00 pm
Kalamazoo Nature Center • [Visit Observing Page for Details](#)

Astrophoto Seminar: Friday, April 17 @ 8:00 pm
Held on Zoom • [Click to Register](#) • See Page 6 for Details

Observing Session: Saturday, April 18 @ 8:00 pm
Kalamazoo Nature Center • [Visit Observing Page for Details](#)

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The sky is falling! March had several reports of fireballs (meteors brighter than Venus) and bolides (meteors that break apart in the atmosphere, creating a terminal flash) across the United States, Canada, and Europe. There were over 94 significant events logged since March 1st.

On March 8th, a massive daytime bolide, with over 3,000 reports, left a visible smoke trail as it passed over France, Germany, Luxembourg, Belgium, and Switzerland. On March 21st, over 180 witnesses in Houston, Texas, reported another significant bolide. A suspected piece of the resulting explosion, a meteorite roughly the size of a golf ball and unusually heavy, crashed through the [roof of a home](#). A brilliant blue meteor was captured on camera in Spain on March 22nd. Another fireball was seen on March 22nd by over 200 people, first observed 49 miles above Chowchilla, California, and moving south at 35,000 miles per hour. There were also reports in Arizona and Nevada.

Two meteors were reported in our region within a span of a week. A 7-ton, 6-foot diameter meteor exploded over Northeast Ohio on March 17th. Meteorites, like the one pictured below, were discovered in Medina County. Another fireball lit up skies across the Great Lakes on March 23rd. I asked Pete Mumbower if he captured it on his all-sky camera mounted on his home in Vicksburg, but it didn't capture it since his camera clips 10° from the northern horizon. According to NASA's All



Sky Fireball Network, the meteor was first detected about 42 miles above central Michigan near the small town of Hope. It traveled northeast at roughly 29,000 mph before breaking apart about 23 miles above Saginaw Bay. At its peak, the fireball was estimated to be about 40 times brighter than the planet Venus. Just hours after the Great Lakes event, another bright fireball lit up skies across the Pacific Northwest on March 23rd. The American Meteor Society said it received 137 reports

from Oregon, Washington, northern California, and Nevada. Witnesses and dash-cam video captured a vivid green streak across the early-morning sky.

Looking at the path of these recent meteors, it's clear none of them have a common origin. According to Bill Cooke of the NASA Meteoroid Environment Office, "Spring is fireball season. For reasons we don't fully understand, the rate of very bright meteors climbs 10% to 30% during weeks around the vernal equinox." [Refer](#) to the map of fireballs reported by U.S. government sensors between April 15, 1988, and March 23, 2026. Their distribution around the globe looks totally random. Ohio-class fireballs hit Earth roughly once a month, but almost all of them go unnoticed by people because they occur over oceans or remote regions.

This month, two comets are worth monitoring. Comet C/2026 A1 (MAPS) is a Kreutz sungrazer discovered in January 2026 and will reach perihelion around April 4, 2026. At that time, it will pass about 101,000 miles (162,000 km) above the Sun's surface. If it survives, it will be best seen from the southern hemisphere. We northern observers may see it very low on the southwest horizon at dusk. April 4th is a Saturday, so that may mean a trip to Lake Michigan if it is clear. Comet C/2025 R3 (Pan-STARRS) reaches perihelion (0.50 AU) on April 19th. It could reach 2nd magnitude in the morning sky around April 20th to the 27th, thanks to forward scattering from the Sun.

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March Meeting Minutes



The Kalamazoo Astronomical Society's 90th anniversary celebration continued on Friday, March 6th. KAS President Richard Bell commenced the general meeting at 7:06 pm EST. An estimated 40 members and guests were present at the Kalamazoo Area Math & Science Center, while approximately 60 people joined us via Zoom.

In his President's Report, Richard said the time for reminders was over. The KAS membership roster will be purged of expired members on March 7th. The much-anticipated field trip to Adler Planetarium is planned for June 13th. The [itinerary](#) will be very similar to our [last field trip](#) to Adler in November 2007.

Richard said that Pete Mumbower, Scott Macfarlane, and he will be traveling to Suffern, New York, for the Northeast Astronomy Forum (NEAF) on April 11th and 12th. Pete also plans to attend the Northeast Astro-Imaging Conference (NEAIC) on April 9th and 10th. We would love to see a few more members attend as well.

Finally, volunteers are needed to staff our table and conduct solar viewing during the Rock, Gem, Mineral, and Fossil Show on May 2nd and 3rd. We have openings at our table from 2pm to

6pm on May 2nd. We need volunteers for both shifts on Sunday, May 3rd: the first shift is from 10:00 am to 1:30 pm, and the second shift is from 1:30 pm to 5:00 pm. We also need an additional solar observer on Sunday from 12pm to 4pm. Please [contact us](#) to volunteer and represent the KAS.

Our special guest speaker was Prof. Michael Meyer, a professor and the chair of the Department of Astronomy at the University of Michigan (U-M). The title of his presentation was *Thinking Big: From Detroit Observatory to the ESO 39-Meter ELT*.

Prof. Meyer said one of the main goals of institutions like the University of Michigan is to educate and train the next generation of students. Over 50% of students in the College of Literature, Science, and the Arts take an astronomy course. Most of those go on to take jobs related to science, technology, and math.

Prof. Meyer then gave a brief history of astronomy at U-M. In 1852, Henry Philip Tappan became U-M's first president in Ann Arbor and collaborated with Henry Walker of Detroit to raise funds for an observatory. Tappan hired Franz Brünnow, the first U-M faculty member with a PhD. He was appointed as the first director of Detroit Observatory and

played a major role in establishing the study of astronomy in the United States. A 12 $\frac{5}{8}$ -inch refractor was built by Henry Fitz, America's first great telescope maker, and installed in 1857. At the time, the Fitz (as it is known) was the third-largest telescope in the world. It is still in use for outreach to this day, providing educational programs and public viewing opportunities for astronomy enthusiasts.

The Michigan-Dartmouth-MIT Observatory was established on Kitt Peak in 1975. It has two reflecting telescopes, the 2.4-meter Hiltner Telescope and the 1.3-meter McGraw-Hill Telescope, which was originally located near Ann Arbor.

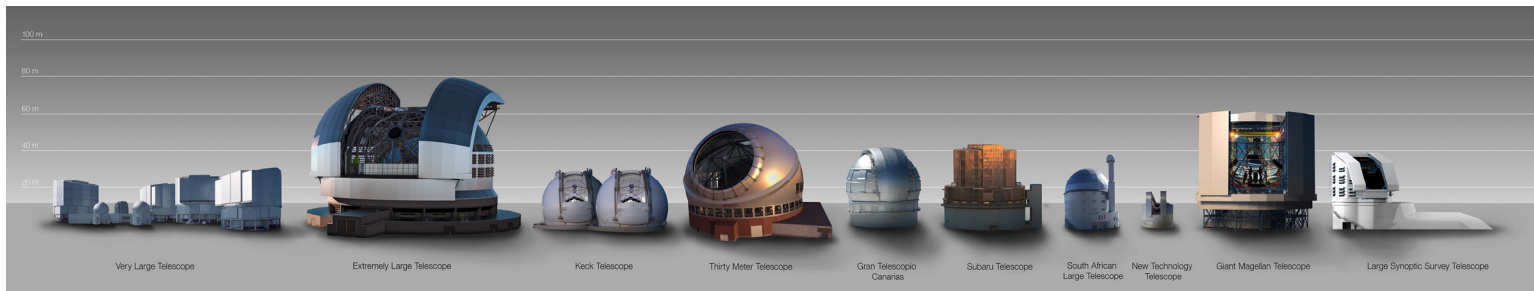
Since first light in 2000 and 2002, the astronomy department's main research facility has been the twin 6.5-meter Magellan Telescopes at Las Campanas Observatory in Chile. U-M is a 10% partner along with several other institutions and universities.

Prof. Meyer then discussed one of his areas of research, looking for planets around stars like the Sun. Detecting the light from planets is exceedingly difficult due to the overwhelming glare of their parent star. Prof. Meyer illustrated this point with a graph. At a wavelength of 10 μ m, Earth and Jupiter are actually equal in brightness. Jupiter may be larger, but its atmosphere is much colder than Earth's (150K for Jupiter and 300K for Earth).

Another barrier in imaging planets around other stars is Earth's atmosphere. All large aperture, ground-based telescopes today are equipped with adaptive optics. This is a real-time correction system that counteracts the blurring effects of atmospheric turbulence by measuring distortions in an incoming wavefront and reshaping a deformable mirror hundreds or thousands of times per second to restore a near-diffraction-limited image.

Prof. Meyer noted that the ground-based observational window to detect the emissions of exoplanets is between a wavelength of 1 and 28 μ m. These are the wavelengths many newer ground-based telescopes work in. Space-based





telescopes also take twice as long to build and cost at least as much as a ground-based telescope.

Prof. Meyer also noted that a ground-based 39-meter telescope can make the same observations one thousand times faster than a 6.5-meter ground-based telescope like Magellan. However, a 6.5-meter space-based telescope (like the James Webb Space Telescope) is one thousand times faster than a 39-meter ground-based telescope. The reason, of course, is due to the brighter background of the sky on Earth's surface.

In the search for habitable planets around other stars, the first targets for the next generation of extremely large ground-based telescopes will be those in the Sun's immediate neighborhood. In fact, astronomers like Prof. Meyer attached a special instrument to the Very Large Telescope and detected a potential gas giant between Alpha Centauri A and B about six years ago. The James Webb Space Telescope got a more recent look and also detected something. Prof. Meyer speculated that, if it is indeed a gas giant and has a large moon, it would be within the star's habitable zone. Prof. Meyer said we would know if minutes of the planet were real if we got to observe it with a 39-meter telescope.

The University of Michigan had been invited to join the planned Giant Magellan Telescope, a 25.4-meter telescope with seven 8.4-meter mirrors. However, they were not able to raise enough money, and the project is now stalled due to lack of funding. There's also the proposed Thirty Meter Telescope to be built on Mauna Kea, but that has run into a whole host of issues, including legal challenges and opposition from local communities concerned about environmental impacts, which have delayed its construction and raised questions about its future viability.

The European Southern Observatory then invited U-M to build four of the instruments for the 39-meter Extremely Large Telescope (ELT). U-M was able to contribute \$21 million to the project

for a 5% to 10% partnership. That would translate to about 100 nights of time a year on each of the four instruments. However, they will have the opportunity to collaborate with the international group for all future time and scientific endeavors related to the ELT.

U-M is the only academic institution in the United States currently partnered with the ESO to design and build the ELT. First light is currently planned for March 2029, and they will get their first data in 2030 with a mid-infrared imager (METIS) that Prof. Meyer has helped develop over much of his career.

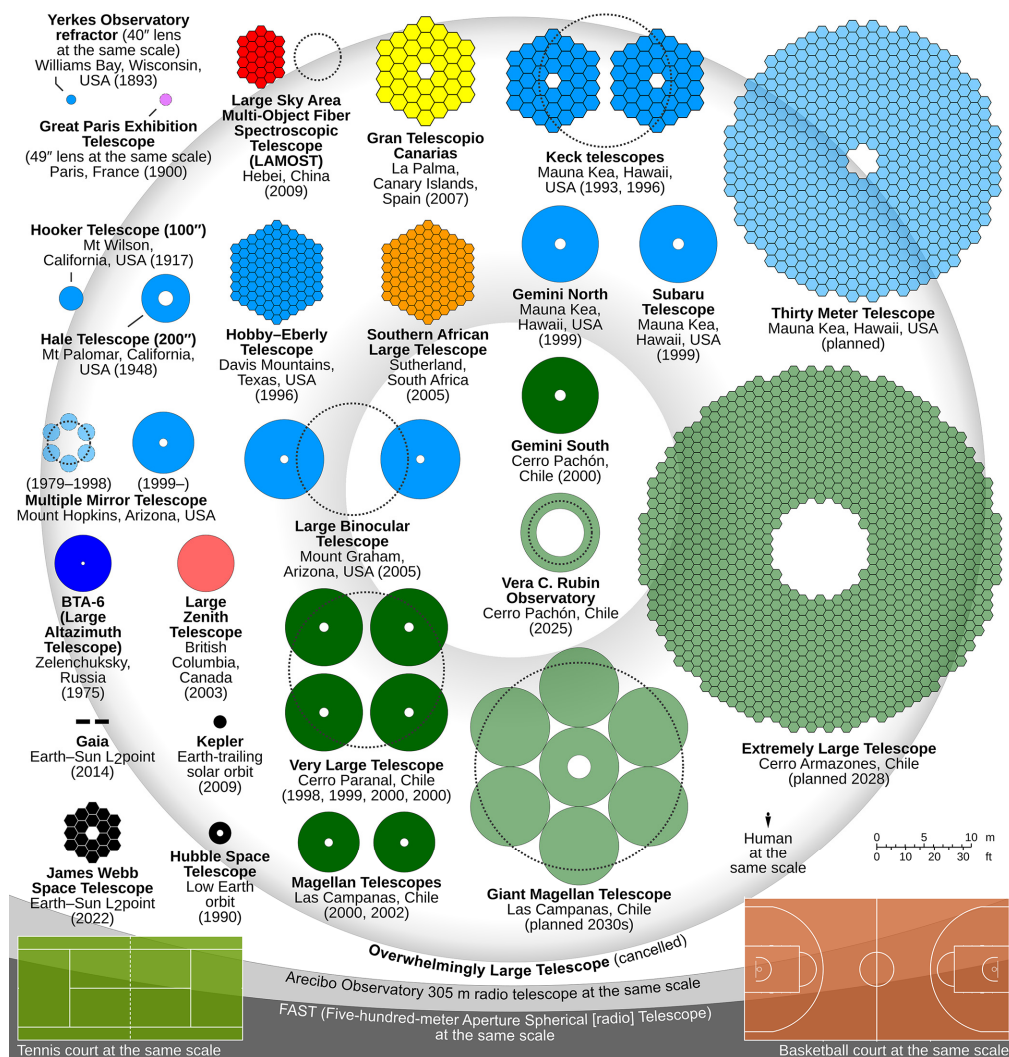
The ELT is currently under construction on top of Cerro Armazones in

the Atacama Desert of northern Chile. It is at an altitude of 9,993 feet. This site was selected due to its extreme dryness (very low precipitable water vapor and only about 4 inches of annual rainfall), 320 clear nights a year, very steady seeing, and minimal light pollution.

These are the four instruments that U-M is helping to build for the ELT:

ANDES (ArmazoNes high Dispersion Echelle Spectrograph): Aimed at searching for signs of life on exoplanets and detecting the universe's earliest stars.

HARMONI: A 3D spectrograph for high-resolution visible and near-infrared imaging.





METIS: A mid-infrared imager and spectrograph to study planet-forming disks.

MOSAIC: A multi-object spectrograph designed to map the early universe and the formation of the first galaxies.

Prof. Meyer concluded his presentation with a brief discussion of the biosignatures they will look for in exoplanet atmospheres. The ELT may be able to help discover the first galaxies and black holes in the universe as well.

Tim Kurtz kindly provided snacks during the break, while Philip Wareham has once again volunteered to bring snacks for the upcoming April meeting.

In observing reports, several members saw the Moon-Mercury conjunction on February 18th when they were only 0.8° apart. Pete Mumbower had posted a photo of the conjunction on the Society's Facebook group page. Richard reposted it on our [Bluesky account](#), and it had racked up over 6,500 likes! John Van't Land also [shared some great photos](#) of the conjunction that he had taken from the Calvin College parking lot using a telephoto lens.

Several members got up early on March 3rd to witness the total lunar eclipse. Mike Sinclair got up at 5:55 am to watch it and reported that it was an excellent eclipse. Brody Wesner posted some [very impressive photos](#) of the eclipse to our Facebook group page. Gary Vincent also snapped a few images from Bonita Springs, Florida. Jack Price observed the eclipse on a livestream from Griffith Observatory in Los Ange-

les. Richard reported that he observed the eclipse with members on the lakeshore, only to wake up and realize it was just a dream!

In astronomical news, a new comet, C/2026 A1 (MAPS), was discovered on January 13th. It's a Kreutz sungrazer, fragments of a single giant comet that shattered centuries ago that have highly elliptical orbits that pass extremely close to the Sun, often resulting in their destruction. If it survives the trip around the Sun, it should come into view around April 4th. It will be best from the Southern Hemisphere, but we may be able to at least see a long tail coming from the western horizon.

Jack Price has taken possession of the Celestron CPC 800 GPS Schmidt-Cassegrain telescope that was stolen from the Society's storage unit on Christmas Day last year. The telescope will soon be placed up for sale.

Artemis II is scheduled to launch on April 1st (with windows through April 6th and April 30th). The crew includes Reid Wiseman, Victor Glover, Christina Koch, and Jeremy Hansen. This will be a crewed flyby mission around the Moon.

Artemis III, planned for 2027, was previously scheduled to be the first Moon landing. The mission will involve the Orion spacecraft docking with a commercial human landing system in low Earth orbit.

Artemis IV is now scheduled to be the first lunar landing mission since 1972. It is targeted for early 2028. Artemis V is also a surface mission planned

for late 2028. Future missions aim to build up to a cadence of roughly one lunar mission per year.

Tim Kurtz brought up that the FCC comments period for the SpaceX Orbital Data Center constellation and the Reflect Orbital proposed space-based reflector will be ending on March 9th. The International Dark-Sky Association is organizing an effort with a link on their website with instructions on how to submit comments to the FCC.

Jack Price mentioned that there is a new, astronomically themed movie coming out on March 20th called *Project Hail Mary*, and it stars Ryan Gosling. It is based on the 2021 novel by Andy Weir, who also wrote *The Martian*.

Moving on to upcoming events, the last installment of the *Introduction to Amateur Astronomy* lecture series is on March 14th. Richard made sure to thank Pete Mumbower for helping to answer questions during all four of the lectures held thus far (and he plans to help for the fifth as well).

The first of three astrophotography seminars to be held on Zoom begins on March 20th. Our special guest presenter will be Trevor Jones, creator of the popular YouTube channel *AstroBackyard*. The first hour will cover ZWO's popular ASI AIR controller, while the second hour will be a deep-sky processing tutorial with Adobe Photoshop. [NOTE: The tutorial [will be released](#) on our YouTube channel on April 3rd.]

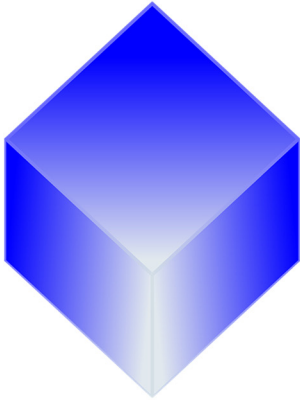
Our annual Messier Marathon is scheduled for Saturday, March 21st, at Richland Township Park if skies are clear. Richard noted that the 21st is the ideal time to conduct a marathon.

Richard asked member Tim Kurtz to come up and sign the purchasing agreement between him and the Society for the PlaneWave CDK20 that was donated by the late Fred Dutton. In the agreement, Tim agrees to purchase the CDK20 for \$25,000 but will make regular payments of at least \$5,000. The initial payment made at the meeting was \$10,000. The KAS Remote Telescope will benefit from all proceeds generated from the sale of the CDK20 and other equipment donated by Fred.

The meeting concluded at 9:13 pm.



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



PixInsight

A Simple and Effective Workflow for 2026

with **Pete Mumbower**

PixInsight is the premiere astronomical image processing program currently used by astrophotographers. It offers an incredibly powerful suite of tools, but its complexity can be daunting for beginners and those with limited experience.

In this interactive program, Pete will cover the fundamentals to help participants achieve impressive results by utilizing some of its latest features. He will address topics such as managing gradients, performing color correction, applying sharpening techniques, and transitioning from linear to stretched formats, among others.

This seminar will be recorded and uploaded to our YouTube channel. However, attending live will give you the opportunity to ask Pete questions along the way.



— **About the Presenter** —

Pete Mumbower is regarded as one of the foremost and most knowledgeable astrophotographers in the KAS. First joining in the early 1990s, he serves as a Member-at-Large on the KAS board. In addition to his passion for astrophotography, Pete is an enthusiastic runner and has worked as an IT professional for 20 years in the West Michigan area.

Friday, April 17th @ 8:00 pm EDT

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

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Lee Inman Plainwell, MI Family 2026	Kirk & Angela Korista Portage, MI Family 2026	Girts Lorencis Allegan, MI Senior 2027	Alfred McClure Griffin, GA Senior 2026	Cheryl Muzikowski Peoria, AZ Supporting 2026	Mike Patton Plainwell, MI Senior 2027
John Isles Richland, MI Senior 2028	Bill Kovats Portage, MI Senior Family 2027	Maggie Lu Vicksburg, MI Family 2026	Mark McClure Cooper Twp., MI Senior Family 2026	Harry Nash South Haven, MI Senior 2026	Ralph Pinney Greenville, TX Regular 2026
Arya Jayatilaka Kalamazoo, MI Senior Family 2027	Russ Kowalysin Kalamazoo, MI Senior 2026	Gary & Phyllis Lubbert Kalamazoo, MI Senior Family 2026	Pamela McCormick Cumberland, MD Supporting 2026	Stephen Naylor Fort Mill, SC Supporting 2026	Jeremiah Poole Portage, MI Family 2027
Chip Johnson Plainwell, MI Senior 2026	Kevin Krochmalny Livonia, MI Regular 2027	Chuck Lund Paw Paw, MI Senior 2026	Stephen McDonald Evanston, IL Supporting 2026	Ron Niehus Newberg, OR Senior 2026	Wendy Powell Clark, CO Supporting 2027
Phillip Johnson Portage, MI Regular 2027	Jim Kurtz Kalamazoo, MI Regular 2026	Linwood Carlton Lyles Sterling Hts., MI Senior Family 2026	Sandi McGuire Kalamazoo, MI Senior Family 2027	Bill Nigg Deming, NM Lifetime n/a	Jack & Ruth Price Kalamazoo, MI Senior Family 2026
Don Jones Portage, MI Senior 2027	Tim Kurtz Kalamazoo, MI Regular 2027	Chris & Jim Lynch East Falmouth, MA Senior Family 2027	Joe McJilton Battle Creek, MI Regular 2027	Patrick O'Connell Paw Paw, MI Student 2027	Dominic Pullo Kalamazoo, MI Family 2026
Richard Juarez Wichita, KS Senior 2026	Kevin LaMarre Raymond, ME Senior 2026	Scott & Janet Macfarlane Schoolcraft, MI Family 2027	Paul McKinley Carson City, MI Senior Family 2027	Amy Ohlert Lawrence, MI Family 2026	David Puzyczny St. Joseph, MI Regular 2026

Membership of the Kalamazoo Astronomical Society

Jay Raycraft
Kalamazoo, MI
Senior | 2026

Paul Santamaura
Toronto, ON
Supporting | 2026

Tadeusz Skierkowski
Howell, MI
Senior | 2027

Gary & Karen Theisen
Hickory Corners, MI
Senior Family | 2026

Richard Voorman
Kalamazoo, MI
Regular | 2027

Fred Western
Kalamazoo, MI
Senior Family | 2027

Jonathan Reck
Plainwell, MI
Senior Family | 2027

Matthew Schie
Auburn Hills, MI
Regular | 2026

Bill Slogeris
Auburn Hills, MI
Regular | 2026

Dale Thieme
Kalamazoo, MI
Senior | 2027

Allan Wachter
Tempe, AZ
Senior | 2027

John Wheatley
Louisville, KY
Supporting | 2026

Raeann Reid
Fredericksburg, TX
Supporting | 2028

Eric Schreur
Kalamazoo, MI
Lifetime | n/a

William Snyder
Caledonia, MI
Senior | 2026

Jett Thomas
Kalamazoo, MI
Regular | 2026

Robert Wade
Salem, NH
Supporting | 2026

Bob White
Plainwell, MI
Senior | 2027

Henry Ricci
East Falmouth, MA
Senior | 2026

Matthew Schuld
Kalamazoo, MI
Family | 2026

Steven Sorrentino
Venice, FL
Senior | 2026

David Tillman
Clarksville, MD
Supporting | 2026

Brian Welsh
Waldo, WI
Family | 2027

Jacob White
Kalamazoo, MI
Regular | 2026

Michael Ricco
Kalamazoo, MI
Senior Family | 2027

Joe Setaro
Danbury, CT
Supporting | 2026

Kenyon Spencer
Buckeye, AZ
Supporting | 2027

Jonathan Towne
Bangor, MI
Senior | 2027

William Walkowiak
Portage, MI
Senior | 2026

Molly Williams
Kalamazoo, MI
Senior | 2026

Amy Riker
Richland, MI
Family | 2026

Frank & Susan Severance
Kalamazoo, MI
Senior Family | 2026

Andre Sprauve
Colorado Springs, CO
Regular | 2026

Henry & Martha Upjohn
Decatur, MI
Family | 2026

Lynn Ward
Green Bay, WI
Supporting | 2026

John Wing
Portage, MI
Senior Family | 2026

Camille Riley
Augusta, MI
Senior | 2027

Sresthaa Shaga
Kalamazoo, MI
Regular | 2026

Arles Stern
Portage, MI
Senior Family | 2027

Elaine VanBelleghem
Kalamazoo, MI
Regular | 2027

Philip Wareham
Portage, MI
Regular | 2026

Peter Wolczko
Amherst, NH
Regular | 2026

Lynn Risser
Fayetteville, AR
Senior | 2027

Gregory Shanos
Longboat Key, FL
Supporting | 2027

Kathy Stewart
Tracy City, TN
Senior | 2026

Michael Vandever
Lawton, MI
Senior Family | 2026

Todd Watson
Mattawan, MI
Regular | 2026

Karen & Klay Woodworth
Kalamazoo, MI
Family | 2026

Mercedes Rivero Hudec
Narragansett, RI
Supporting | 2026

Tonya Shelton
Pueblo West, CO
Supporting | 2028

John Stickler
Franklin, TN
Regular | 2027

Mike Van Goor
Chelsea, MI
Family | 2026

Frank Watts
Deming, NM
Supporting | 2026

David Woolf
Kalamazoo, MI
Family | 2026

Andrew C. Robins
Kalamazoo, MI
Regular | 2027

Jason Sich
Schoolcraft, MI
Regular | 2026

David & Marianne Stier
Battle Creek, MI
Senior Family | 2026

John Van't Land
Grand Rapids, MI
Senior | 2027

Mark Watts
Portage, MI
Senior | 2026

Doug Wussler
Tallahassee, FL
Supporting | 2026

Ernesto Rodriguez
Brownsburg, IN
Supporting | 2027

Lloyd Simons
Mattawan, MI
Family | 2027

Don Stilwell
Battle Creek, MI
Senior Family | 2027

Gene Viale
Paola, KS
Supporting | 2026

Caroline Webber
Kalamazoo, MI
Senior | 2026

Mohammed Zafar
Kalamazoo, MI
Regular | 2027

Aaron & McKenzie Roman
Kalamazoo, MI
Family | 2026

Errol Simpson
London, UK
Senior Family | 2027

Brent Summers
Hapeville, GA
Senior Family | 2026

Rick Viel
Kalamazoo, MI
Senior Family | 2027

Katie & Duane Weller
Grand Rapids, MI
Family | 2027

Peter Zillmann
Kalamazoo, MI
Student | 2026

Liv Marie Saether
Biri, Norway
Senior Family | 2026

Michael & Karen Sinclair
Kalamazoo, MI
Senior Family | 2026

G. Hiroko Taguchi
Bethesda, MD
Supporting | 2026

Alvaro Villamizar
Carlsbad, CA
Supporting | 2026

Brody Wesner
Richland, MI
Family | 2026

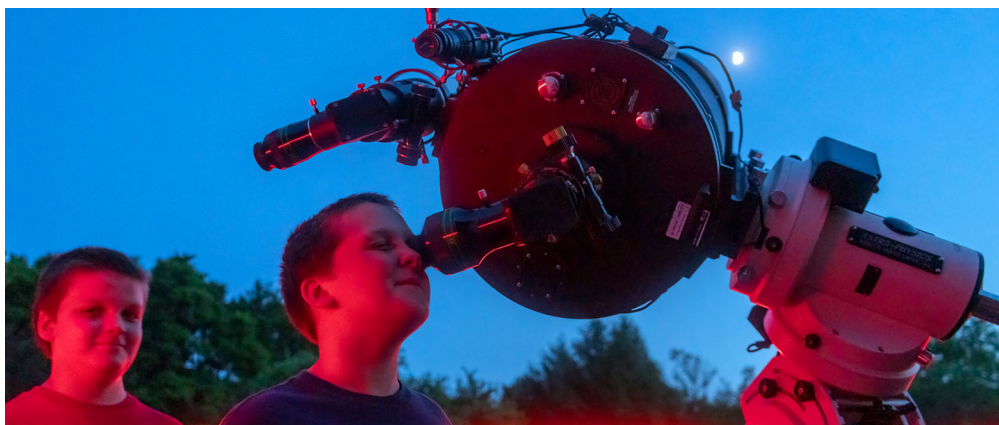
Theresa Zittritsch
Williston, VT
Regular | 2026

Lynn Sagar
Schoolcraft, MI
Regular | 2027

Greg Sirna
Centreville, MI
Senior Family | 2027

David & Dorothy Terhune
Watervliet, MI
Senior Family | 2026

Gary & Christina Vincent
Portage, MI
Senior Family | 2026




KAS Membership Summary	
Regular Members:	64
Students Members:	6
Seniors Members:	81
Family Members:	41
Senior Family Members:	53
Lifetime Members:	3
Supporting Members:	50
TOTAL NUMBER of MEMBERSHIPS:	298
ESTIMATED NUMBER of INDIVIDUAL MEMBERS:	~392

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Public Observing Sessions
at the *Kalamazoo Nature Center*

April 4th
Jupiter & the Orion Nebula

April 18th
Galaxies of the Virgo Cluster



Gates Open: **8:00 pm** | Observing Begins: **8:30 pm**

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A KAS 90th Anniversary Special Event

Leopard Spots & Poppy Seeds

Recent Developments in The Search for Evidence of Ancient Life on Mars

presented by

Prof. Michael Velbel

Michigan State University

Perseverance may have struck scientific gold with Sapphire Canyon, an organic-rich sample pulled from a rock marked by mysterious “leopard spots” and “poppy seeds.” These tiny features pack a big punch: their mix of oxidized and reduced minerals hints at ancient chemical reactions that might have powered microbial life on early Mars. This talk dives into why this find has scientists buzzing—and why the return of these samples could be a watershed moment in the search for life beyond Earth.

Friday, April 3rd @ 7:00 pm EDT

Kalamazoo Area Math & Science Center

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

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

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