

Committed to Supporting Amateur Astronomy since 1933



The IAS News & Views

Volume 91, Issue 6



Indiana Astronomical Society General Meeting (Remote Speaker)

Saturday, July 8, 7:00 PM

“Cataclysmic Variables, Recurrent Novae, and T Cor Bor”

Walt Cooney

Co-lead of the AAVSO Cataclysmic Variables Section

Cataclysmic variable stars like supernovae and novae have exploded into view many times in the thousands of years we've been leaving records. These stellar laboratories have been critical to our understanding of the universe. Professional and amateur astronomers are working together to understand these systems that still hold many mysteries. The Recurrent Nova, T CrB, is predicted to go off any day and amateurs and pros are working hard to learn all we can from it.



Walt Cooney is a retired chemical engineer and an amateur astronomer with a life-long passion for the hobby. He got started in astronomy with a report in fourth grade on the constellation Orion. He has served as President of the Baton Rouge Astronomical Society, is the Field Trip and Observing Coordinator for the Houston Astronomical Society, and serves on the Board of Directors of the Houston Astronomical Society and the AAVSO. He is the co-lead of the AAVSO Cataclysmic Variables Section and is the coordinator of the CAMS-Texas meteor camera network. While he started as a visual astronomer, he stepped into the CCD revolution in the mid-90's and has since discovered 60 asteroids, 50 variable stars, and authored or coauthored 50 papers in the literature. He is a founding member of the Sonoita Research

Observatory that became the first AAVSONet telescope in 2005. Asteroid (35365) Cooney was named for him by Dr. Petr Pravec.

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Correction Notice:

In our previous newsletter issue, we incorrectly attributed the photo on page 25 to John Molt. The photo was actually taken by James Stankevitz. We sincerely apologize for this oversight and any confusion it may have caused.

From the President’s Desk



With June temperatures already in the 90s we can't help but wonder just how hot it will get in July and August this year. Our meeting this month will be held at Link Observatory on Saturday 6 July so let's hope for some cool breezes that evening!

The Indiana Family Star Party at Camp Collum begins on Tuesday, July 30th, and runs through Sunday, August 4th. The Indiana Astronomical Society has a long affiliation with the IFSP and once again this year we are supporting the party by helping secure excellent speakers, sharing our 100mm Lunt Hydrogen Alpha solar telescope, donating equipment for sale or raffle, and staffing various posts to assist with the logistics. If you're able to help out at the registration desk for a two-hour shift or more, use this link to volunteer: [2024 IFSP Volunteer Sign Up](#)

The summer triangle has returned and as of this writing the solstice has passed and the nights are growing longer. Our observing program at West Park in Carmel has resumed and we're working on adding a new dark sky site at Strawtown Koteewi Park in Hamilton County. We'll meet again at McCloud Nature Park on 13 July. We have a group trip to the Cincinnati Observatory planned for 10 August and the week before that a recognition of the 85th Anniversary of First Light for the Link 36-inch reflector. I hope you can join us for one or more of these events as we celebrate the lengthening nights of summer and the beautiful illumination fixed above us in the dark.

— Robert Aull

Astronomical League

Did you know that the Astronomical League has an award for Outreach? I know several IAS members that should apply for this award if they have not already. The Astronomical League's Outreach Award encourages and recognizes the work of individuals who promote the hobby of astronomy. Outreach programs connect individual astronomers in a way that enables these individuals to share, teach, and mentor one another so that we all enjoy our hobby to an ever-greater extent. The requirements for the award are relatively simple: 1. Participate in a minimum of five outreach events and 2. Each event must be a minimum of two hours.



[Outreach-Award](#)



Effective immediately, the Astronomical League is bringing you another Observing Challenge. This one is for the pending eruption of the Nova T Coronae Borealis. It is expected to happen sometime between now and September.

[AL Observing Challenge Special Observing Award](#)

July General Meeting Call-in Details

IAS July 2024 General Meeting

Jul 6, 2024, 7:00 – 9:00 PM (America/New York)

Please join my meeting from your computer, tablet or smartphone.

<https://meet.goto.com/778444349>

You can also dial in using your phone.

Access Code: 778-444-349

United States: [+1 \(872\) 240-3212](tel:+18722403212)

Get the app now and be ready when your first meeting starts:

<https://meet.goto.com/install>

You may also join without installing any software by using the Google Chrome browser.

IAS NEWS

Upcoming Events for July

The following events will occur rain or shine.

IAS Program Planning/Board Meeting

Wednesday, July 3 at 7 PM, via GoToMeeting. The IAS board will get together to discuss the business of the Society. Due-paying members are welcome to participate and provide input. Please monitor [our collaboration site at groups.io](https://groups.io) for details.

IAS General Meeting

Saturday, July 6 at 7 PM. The IAS general meeting is scheduled to occur at the Goethe Link Observatory, 8403 Observatory Rd, Martinsville, IN 46151 (Also Virtual) ([map](#)) The public is welcome.

Those who are unable to make it to the meeting may also participate virtually, using a GoToMeeting teleconference. For details and call-in information, see the first three pages of this newsletter.

Indiana Family Star Party, July 29- August 4

The early registration period ends July 15

Dozens of amateur astronomers, astronomy enthusiasts, and families will gather at [Camp Cullom](#), near Mulberry, IN, for immersion in the hobby and camaraderie of astronomy at the 2024 Indiana Family Star Party (IFSP). Features include celestial observing every night (weather permitting), the Constellations for Kids program, for kids and adults on Friday evening, speakers on Saturday afternoon, Cloudy Night Campfire, Kid's Corner on Saturday evening, an ice cream social on Friday evening, a prairie grass nature walk Saturday evening, an on-site food vendor (Friday dinner through Sunday breakfast), late evening movies with free popcorn, free coffee, free hot chocolate, and more. Solar observing will also occur.



Panoramic images of the Camp Cullom observing field and Prairie Grass Observatory. Photos courtesy Mike Lockwood.

Dates:

Full-Event participants: July 29 - August 4, 2024. Full Event participation includes a campsite on the Camp Cullom observing field. There are no formal activities planned on July 29 - August 1; these optional days/nights are available for observing and camping for full-event registrants.

Single-Day participants: July 29-31 gates open at 3:00 p.m.. Friday 8/2 and Saturday 8/3 gates open at 10:00 a.m.

Please arrive before 10 p.m.

Registration:

Pre-registration forms are available at <http://www.indianastars.com/starparty/registration.html>.

Discounted, full-event early registration is available until July 5. At-gate registration can also be done. Full-event group registration is also available (for groups of 10 or more people).

Prices:

Full Event Early Registration (before July 15): Individual — \$25; Family — \$35; Groups — Family rate for every 10 people or portion thereof. Full-event registration includes a spot on the observing field.

Full Event after July 15 or At-Gate: Individual — \$50; Family — \$60

Single-Day Participants: \$5 for one person; \$10 for two people; \$15 for a family/carload.

Note: Does *not* include a spot on the observing field.

Lodging:

Those registering for the full-event option are welcome to camp on the observing field or on the observatory lawn (around the observatory buildings). Larger groups will use campsites available in other areas of the camp. If camping is not your thing, other lodging options are available in Frankfort and West Lafayette.

If you've never participated in a multi-night star party before, the IFSP is a great way to get your feet wet. It's nearby, it's *very* inexpensive, and you'll encounter lots of familiar faces. For more detailed information, be sure to check out the IFSP website at <http://www.indianastars.com/starparty/> or send an email to WVASinfo@gmail.com

— Sara Farkas

Observing Activities for July

The following events are weather-dependent and subject to last-minute cancellation. Please monitor [our collaboration site](#) for updates and do not drive out until you receive confirmation that it's a "go."

Link Activities (Members and Invited Guests) —

The IAS has deep-sky observing sessions scheduled to occur at Link Observatory on the weekend of July 5-6, (the 6th is immediately after our general meeting) again on the weekend of July 12-13, and once more on July 26-27.

Come observe with the telescope operators using the Link 36" and/or Tanager Hill 14" scopes, or bring your own and set up on the north observing field.

McCloud Activities (Public Event) —

When: Sat, July 13, 9:00 pm – 11:30 pm

Where: McCloud Nature Park, 8518 Hughes Rd, North Salem, IN 46165 ([map](#))

Description: There will be a half-hour, night-sky orientation presentation at the Nature Center at 9:00 PM. Weather permitting, members of the Indiana Astronomical Society will have their telescopes set up nearby for observing under the stars after the presentation.

IAS members bringing scopes are asked to arrive at 8:30 PM.

Sunset is at 9:15 PM.

West Park Activities (Members Only) —

West Park observing is scheduled for July 12th. We will gather at West Park at 8:30 pm, weather permitting.

Observing and Outreach Reports

June 8 Link Observatory — Following an excellent monthly meeting at Link Observatory last night, Dave Collier was demonstrating the various moving parts and controls of the 36-inch to a few members when I came up on deck to help him bed down the scope. Damon Disch, Jim Sobek, and Dave Rust kept glancing out the viewing slit and looking back at us like kids who wanted to know why can't we play outside if it isn't actually raining? Dave said "c'mon Robert let's show them how we find stars before sunset" and so we zeroed out the scope, initiated the Argo Navis digital setting circle system by manually acquiring Denebola and Arcturus as alignment stars, then used it to guide us to globular clusters M3 in Canes Venatici, M53 in Coma Berenices, and finally M13 in Hercules before the clouds completely covered the sky just shy of 11PM. In appreciation, the three instigators remained to help us shut down the 36-inch and tuck her in for the night.

— *Robert Aull, Link Observatory Manager*

June 14 West Park — Well it finally happened, Friday night the clouds parted and we showed up at West Park for stargazing. We had a great turnout, Bill Musick, Phil Thompson, Maribel Gaspang, Sundaram “Raghu” Raghuraman, Adam McFarland (and son), Liza McFarland, and John Musick. We had 6 different telescopes operating. The weather was forecast to be good but had changed in the afternoon. However, when it counted the skies were clear.

We had a variety of targets located including M 13 Hercules Cluster, M 3 Globular Cluster, M 57 Ring Nebula, M81 Bodes Nebula, Mizar double star, Albireo double star, and the Moon.

The weather was perfect with a gentle breeze and comfortable temperatures. I arrived at 9:45 PM and we left the park around 12:15. Keep an eye open for future star gazing opportunities at West Park and plan to join us. Thanks to all the participants, star gazing is always more fun when sharing our telescope views with friends.

— *John Musick*

June 14 West Park — The weather was great, the company was great, and the views were great. My family had a wonderful time. Thanks to everyone that brought out their scopes- including my son, Philip, with his Starblast 4.5 (you have to start somewhere!). Very happy we joined IAS and hope to attend these events at West Park on a regular basis.

— *Adam McFarland*



Photo By Saras Farkas

June 15 McCloud Stargaze — Beginning at 9PM, Robert Aull gave an astronomy lecture at McCloud Nature Park that coincided with a campout in the park. The following IAS individuals either set up a scope or moved through the observing crowd providing information about the sky and our society: Cynthia Franklin and Julius Vaughn, Mike Newberg, Adam and Heather Strain, Robert Aull, Chris Eichrodt (new member), Rick Betuker, Larry Cates, Jon Swanson, Kelly McCormick, and Sara Farkas.

Targets included bright waxing gibbous Luna, Arcturus in Bootes, the Summer Triangle, Albireo in Cygnus, M57 the Ring Nebula in Lyra, Antares in Scorpio, and M13 the Great Globular Cluster in Hercules. Although it had been a warm day, after darkness fell the observing field became surprisingly cool and light clouds forced us to observe through sucker holes--regardless, the crowd very much appreciated the views and posed many excellent questions.

Upcoming Outreach Events

Saturday, October 12 — The IAS is scheduled to participate in the Celebrate Science Event at the Indiana State Fairgrounds, Exhibition Hall 9:30 am – 5:00 pm

For further information or to volunteer, email Steve Haines at events-coordinator@iasindy.org.



Photo by Grant Hiestand (M 27)

IAS Coordinator Tom Borlik – Historian

Tom Borlik, esteemed as the repository of all information on Dr. Goethe Link, the Link Observatory, and the Indiana Astronomical Society (IAS), has become an indispensable figure in the astronomical community. Recognizing his extensive knowledge and dedication, former IAS president John Molt wisely appointed Tom as the IAS historian, a role he graciously accepted. Tom has continually informed and entertained both the group and its individual members, sharing his wealth of knowledge about the IAS with enthusiasm and expertise. Here is his story:

“Although my interest in astronomy seemingly dates back to the dawn of time (I was present when the up-thrown femur bone morphed into the orbiting space station and it was the first time that I heard Strauss), in reality it began with the close opposition of Mars in August of 1956. The excitement & enthusiasm of that period is closely paralleled in the 1st chapter of Timothy Ferris’s book *Seeing in the Dark*.

My first telescope was co-owned with another young high school-bound student (a shared economic adventure because of its extravagant cost of \$15). It was a 2-inch F/25 single element refractor with state-of-the art Huygens eyepieces on a shaky alt-azimuth mount. I never realized that the stars had so many colors! My first really spectacular never-to-be-forgotten view was that of Saturn through a home-made 8-inch reflector belonging to an Irma DeBrucker who was the editor of the newsletter of the St. Joseph Valley Astronomical Society (South Bend).

Mentored by many members of that group including grinding, polishing & figuring my first 6-inch mirror, later attended a summer science program at Indiana University between my junior & senior years of high school where I spent six weeks with their astronomy department. This even included many nights on the 10-inch astrograph in the Asteroid Building in what is now Tanager Hill Observatory. Even though I eventually ended up with an undergraduate degree in astronomy, I never pursued that as a career.

I joined the IAS sometime in the early 70s when it was directed by Walt Wilkins. In the early 80's I ended up building an observatory of a clamshell design (named the Chesley Bonestell Observatory after the 1^o space artist) in our backyard. My grandiose plans called for doing photometric research with its Celestron C14 and an EMI Starlight-1 photometer — data logging being done by a then very powerful VIC-20 computer - this under the aegis of the IAPPP (International-Amateur Professional Photoelectric Photometry group). All this fell by the wayside when we had our 2TM & 3^o sons born about 21 months apart. From then on astronomy took a back seat after seeing both those sons, as well as an older son, through all their science projects, invention conventions, school programs, Little League games, Cub Scouts, then Boy Scouts and seemingly never-ending other sporting venues.

However, for the past twenty-five years, my astronomical focus has been in maintaining the Goethe Link Observatory, albeit state property - a fantastic showplace to help promulgate Dr. Link's vision of the beauty and lore of the night skies!”

— Tom Borlik

From Vision to First Light: The Making of a World-Class Telescope

August 3 2024 marks the 85th anniversary of First Light for the Link 36-inch telescope. Please enjoy the quick history lesson below from the IAS historian Tom Borlik.

In May 1937, the ambitious project to construct a world-class telescope took flight, driven by the passion of Dr. Goethe Link, a renowned surgeon and amateur astronomer. Inspired by the vision of Sam Waters, founder and president of the Indianapolis Amateur Astronomers Association (IAAA), the project aimed to advance the understanding of the cosmos.

Victor E. Maier oversaw project management, while Charles Bowers, the construction contractor, brought the plans to life and coordinated on-site activities. The project relied on a sketch by Russell Porter, famed designer of Mount Palomar, whom Goethe Link had encountered on his honeymoon in the western United States. Alvey Pittman had the ability to solve crucial design challenges, such as accessing the eyepiece three stories above the Observing Deck floor.

Alvey Pittman designed the observatory building, ensuring it provided a stable environment for astronomical observations and securely housed the telescope. Advanced telescope maker Carl Turner supervised the assembly of mechanical components at the Klaisler machine shop at 3009 English Avenue, ensuring the structure's capability to support the telescope's weight and withstand environmental conditions.

The heart of the telescope, its optics, was meticulously crafted by Victor Maier and Charles Hermann. They ground, polished, and parabolized a 400 lb. Pyrex glass disc with an elliptical diagonal. The precision assembly was managed by Klaisler Machinery, ensuring the telescope's alignment and stability were exact.

Under the leadership of Victor Maier, instrument makers assembled the mechanical components, ensuring flawless operation and a perfect fit. Their expertise was essential to the telescope's functionality.

Dr. Wilbur A. Cogshall, chairman of Indiana University's astronomy department, provided critical input on design requirements, ensuring the telescope met scientific standards. Dr. James Cuffey, a recent Harvard graduate and IU post-doctoral fellow, conducted the Hartmann test, which assesses and improves the quality of optical systems, to finalize the 36-inch mirror's figure.

On August 3, 1938, the telescope saw its first light, aimed at the Great Globular Cluster in Hercules, Messier 13, marking a monumental achievement. Upon completion, it ranked among the eight largest telescopes in the United States, highlighting the significance of collaboration and expertise in advancing scientific endeavors.

Link to more Goethe Link Observatory history: [Goethe Link Observatory History](#)

— Victoria Musick and Tom Borlik

June General Meeting

Dr. Catherine A. Pilachowski, a distinguished professor of astronomy at Indiana University and longtime IAS member, delivered an engaging lecture titled "An Astronomer's View of the Atomic Elements." The event attracted a well-attended audience of 50-60 people, both at the Link Observatory and online. Caty's lecture was followed by an enthusiastic Q&A session, highlighting the audience's keen interest.

One memorable quote from her talk was, "I think it's incredible that we can study stars that are hundreds, thousands, or even millions of light years away and still piece together such intricate details about them. This ability to uncover the complex history of element production and formation from astronomical data is one of the main reasons I love doing astronomy and research."

The lecture is available on YouTube for those who wish to listen again. [June 2024 General Meeting](#)



Photo by John Karjanis

John “Shep” Sheperd was recognized with the IAS Distinguished Service Award for his many past roles in the IAS including 14 plus years as observatory manager.



Photo by Sara Farkas

— Victoria Musick

Links to Past General Meetings

[May 2024 General Meeting](#)

[April 2024 General Meeting](#)

[March 2024 General Meeting](#)

[February 2024 General Meeting](#)

[January 2024 General Meeting](#)

[November 2023 General Meeting](#)

[October 2023 General Meeting](#)

[July 2023 General Meeting](#)

IAS Board of Directors Meeting Highlights: June, 2024

The IAS BOD meeting was held on June 1, 2024. There were four officers, and seven board members present. The meeting was called to order at 7:00 pm.

Program Report: Walt Cooney from AAVSO will be speaking on “High Energy X-Rays Hitting Earth” at the July meeting.

Equipment Loan: No equipment loaned or returned. Two telescopes were donated, one will be offered to the IFSP to be used for auction, and the other will be offered for sale.

McCloud: Jon Thomas reported that events will be held on June 15 and July 13.

West Park: John Musick reported that events are scheduled on June 14 and July 12, weather permitting.

IAS Membership: As of May there are 312 current members.

Indiana Family Star Party: Sara Farkas noted that the IFSP is accepting payment by credit card this year. They would like to have donations for raffle prizes.

— *Larry Cates, IAS Secretary*

William A. Anders of Earthrise Photo Fame, dies at the age of 90



Image Credit: NASA

William Anders, born on October 17, 1933, is best known for his role as Lunar Module Pilot on the Apollo 8 mission, where he captured the iconic "Earthrise" photograph. After his historic NASA career, he held significant roles within the National Aeronautics and Space Council and the Atomic Energy Commission and later served as CEO of General Dynamics. Anders' contributions to space exploration and his advocacy for science education have left a lasting legacy.



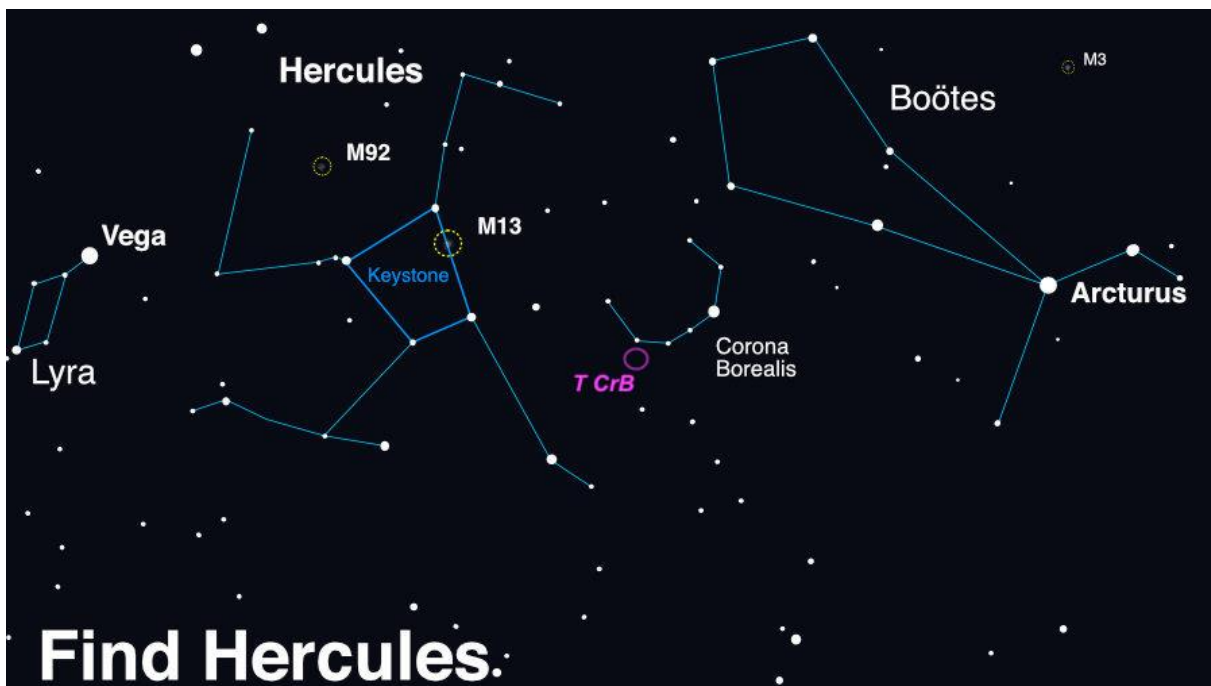
This article is distributed by NASA's Night Sky Network (NSN).

The NSN program supports astronomy clubs across the USA dedicated to astronomy outreach. Visit nightsky.jpl.nasa.gov to find local clubs, events, and more!

July's Night Sky Notes: A Hero, a Crown, and Possibly a Nova!

By Vivian White

High in the summer sky, the constellation Hercules acts as a centerpiece for late-night stargazers. At the center of Hercules is the "Keystone," a near-perfect square shape between the bright stars Vega and Arcturus that is easy to recognize and can serve as a guidepost for some amazing sights. While not the brightest stars, the shape of the hero's torso, like a smaller Orion, is nearly directly overhead after sunset. Along the edge of this square, you can find a most magnificent jewel - the Great Globular Cluster of Hercules, also known as [Messier 13](#).



Look up after sunset during summer months to find Hercules! Scan between Vega and Arcturus, near the distinct pattern of Corona Borealis. Once you find its stars, use binoculars or a telescope to hunt down the globular clusters M13 (and a smaller globular cluster M92). If you enjoy your views of these globular clusters, you're in luck - look for another great globular, M3, in the nearby constellation of Boötes. Image created with assistance from Stellarium: stellarium.org

Globular clusters are a tight ball of very old stars, closer together than stars near us. These clusters orbit the center of our Milky Way like tight swarms of bees. One of the most famous short stories, [Nightfall](#) by Isaac Asimov, imagines a civilization living on a planet within one of these star clusters. They are surrounded by so many stars so near that it is always daytime except for once every

millennium, when a special alignment (including a solar eclipse) occurs, plunging their planet into darkness momentarily. The sudden night reveals so many stars that it drives the inhabitants mad.

Back here on our home planet Earth, we are lucky enough to experience [skies full of stars](#), a beautiful [Moon](#), and regular [eclipses](#). On a clear night this summer, take time to look up into the Keystone of Hercules and follow this sky chart to the Great Globular Cluster of Hercules. A pair of binoculars will show a faint, fuzzy patch, while a small telescope will resolve some of the stars in this globular cluster.



A red giant star and white dwarf orbit each other in this animation of a nova similar to T Coronae Borealis. The red giant is a large sphere in shades of red, orange, and white, with the side facing the white dwarf the lightest shades. The white dwarf is hidden in a bright glow of white and yellows, which represent an accretion disk around the star. A stream of material, shown as a diffuse cloud of red, flows from the red giant to the white dwarf. When the red giant moves behind the white dwarf, a nova explosion on the white dwarf ignites, creating a ball of ejected nova material shown in pale orange. After the fog of material clears, a small white spot remains, indicating that the white dwarf has survived the explosion. NASA/Goddard Space Flight Center

Bonus! Between Hercules and the ice-cream-cone-shaped Boötes constellation, you'll find the small constellation Corona Borealis, shaped like the letter "C." Astronomers around the world are watching T Coronae Borealis, also known as the "Blaze Star" in this constellation closely because it is [predicted to go nova sometime this summer](#). There are only 5 known nova stars in the whole galaxy. It is a rare observable event and you can take part in the fun! The Astronomical League has issued a [Special Observing Challenge](#) that anyone can participate in. Just make a sketch of the constellation now (you won't be able to see the nova) and then make another sketch once it goes nova.

Tune into our mid-month article on the [Night Sky Network](#) page, as we prepare for the Perseids! Keep looking up!

Celestial Events for July

01 – Deep Sky Objects: Explore globular clusters like M13 in Hercules and the planetary nebula M27 in Vulpecula. The cluster IC 4756 is well-placed

13-14 – Delta Aquarids Meteor Shower: Peak around July 12-14. Best viewed after midnight in a dark location away from city lights.

17– Deep Sky Objects: Continue observing Messier objects such as M57 (Ring Nebula) in Lyra and other summer constellations.

24 – Close approach of the Moon and Saturn

28-31 – Southern Delta Aquarids Meteor Shower: Tail end of this meteor shower. Best viewed after midnight.

Solar Eclipse Art Project - Seeking Photos from Indiana!

My name is Callie Dean, and I am a writer based in Shreveport, Louisiana. I am in the process of collecting data for a collaborative, multimedia arts project that aims to tell the story of the April 8, 2024, solar eclipse by visualizing photos and stories from as many points as possible. The project will be installed as part of a larger exhibition at [artspace](#) in Spring 2025, and I anticipate that there will be a digital component as well, which will be viewable to everyone who participates.

You can track the number of responses I've received so far via this Google Map: bit.ly/totalityphotomap. As you can see, most of my responses so far are from the Ark-La-Tex region, and I'm hoping you might have some connections or suggestions about how I can expand my reach in Indiana!

Would you be willing to help by...

- **Joining the project?** Submit your own eclipse photo and story at bit.ly/totalityshare.
- **Sharing the project?** Would it be possible to invite your members to join this project, as well? I would be so grateful if you would be willing to share this project in your newsletter, on your website, on your social media channels, at your events, in conversations with friends, etc. Please let me know if you need any graphics, blurbs, social media posts, QR codes, or additional information.

Please feel free to reach out if you have any questions. Thank you so much!

Callie Dean

Callie B. Dean, Author

[Website](#)

[Facebook](#)

[Twitter](#)

Kirkwood Observatory



Graphic by Samantha Brunker

www.astro.indiana.edu @iuaastro on Twitter

Kirkwood Observatory Open Nights March-July 2024 Schedule

Date	Time
March 20*	9:00-10:30 pm
March 27*	9:30-11:00 pm
April 3*	9:30-11:00 pm
April 17	10:00-11:30 pm
April 24	10:00-11:30 pm
May 1	10:00-11:30 pm
May 8	10:30-11:30 pm
May 15	10:30-11:30 pm
May 22	10:30-11:30 pm
May 29	10:30-11:30 pm

Date	Time
June 5	10:30-11:30 pm
June 12	10:30-11:30 pm
June 19	10:30-11:30 pm
June 26	10:30-11:30 pm
July 3	10:30-11:30 pm
July 10	10:30-11:30 pm
July 17	10:30-11:30 pm
July 24	10:30-11:30 pm
July 31	10:30-11:30 pm

Solar Telescope	
Date	Time
March 9*	12:00-3:00 pm
March 23*	12:00-3:00 pm

For updated weather conditions and closings, scan here for the Kirkwood schedule site:



* With solar viewer distribution!
(While supplies last. Maximum 2 per group.)

Graphic by Samantha Brunker

— Tom Borlik

Reminder: Pets and Other Animals at IAS Functions

During IAS functions, the IAS would prefer that no animals be brought to the observing field, parking lot, or into any building. Over the years we've had issues ranging from urination on equipment, excrement left behind, and a general nuisance. There are folks who are afraid of animals too and being in the dark makes it an even more uncomfortable situation.

We realize that Service Animals (as defined by the [Americans with Disabilities Act](#)) could be an exception so we ask for your best judgment as the IAS are guests on these properties as well. Please note that Therapy Animals and Emotional Support Animals do not meet the ADA definition.

Astro Ads

Do you have or are you looking for astronomy-related materials and equipment? The IAS, as a service to its members, will publish non-commercial ads at no charge. For sale, exchange, or want ads are all accepted. Each ad runs in the newsletter for four months and may be renewed at the owner's request.

To place an ad, send an email to editor@iasindy.org. Be sure to notify us when the item sells.

For Sale:

I have a few things I would like to sell:



80 mm Stellarvue Nighthawk Aplanet F/7

Like new, always stored well.
Stardust metallic white tube
Attached sliding dew shield and original SV lens cap
2" Crawford two speed focuser
Original SV red dot finder
SV cradle for mounting

Original SV padded nylon case

Asking \$250 for local pickup or \$275 shipped and insured.

Seymour Solar SF 425 P1 Solar Filter. Will fit on an 80 mm-90 mm scope with an OD not exceeding 108 mm in very good condition. New cost is \$75 + shipping .

Asking for \$40 local pickup or \$50 shipped

Losmandy style plate for a larger scope. 17" long

Asking for \$40 local pickup or \$50 shipped

Contact:

Jay Simmons

enddst@gmail.com or

Text me at 317-590-6271

Public Outreach Programs

To schedule a program at the Link Observatory or at your site, please contact the following people:

Public Outreach Programs: To schedule a public event, contact the IAS Events Coordinator Steve Haines by sending an email to events-coordinator@iasindy.org.

Goethe Link Observatory tour: To schedule a tour of the Link Observatory, contact Link Observatory Manager Robert Aull by email at link-observatory@iasindy.org.

Equipment Loan Program

Did you know you could borrow a scope or piece of astronomy equipment from the Society and take it for a test drive? Members trying to determine what kind of equipment to buy are welcome to borrow one of the Society's scopes for a month or two and see how they like it. Dave Howard is the program coordinator and can arrange for pickup and training.

We will also consider donations of equipment appropriate for this program. The IAS is a public charity under section 501(c)(3) of the internal revenue code. We would be happy to provide acknowledgement suitable for documentation as a tax deduction.

The Equipment Loan Coordinator may be contacted at equipment@iasindy.org

IAS Membership Report for May 2024

On May 31, 2024, the IAS had a total of 312 members.

The IAS welcomes the following new members:

Lea Casper	Lee Fawkes	William Frye
Joshua Hedges	Grant Hiestand	Mark Howell
Ryan Hurd	John Karjanis	Adam McFarland
Charles Platz	John Speaker	Adam Strain
John Weber		

We thank the following members for their renewal:

Tom Borlik	Doug and Betsy Brown	Clarence Cook
Oscar Cummings	Joshua Francis	Ashley and Todd Frazee
Richard Galloway	Steve Haines	Kyle Kent
Robert Moon	James J Nocon	Donald Pfettscher
Sarah Reynolds	Steve St John	Paul Zeller
Donald Zentz	Catherine Pilachowski	

— Victoria Musick, IAS Membership Coordinator

2024 Meetings and Events Calendar

Month	Board Mtg	General Mtg	Deep-Sky Observing	McCloud	West Park
July	3	6	5,6, 12,13 ,26,27	13	12
Indiana Family Star Party July 30 – Aug 4					
August	7	10 Cincinnati Trip	9,10, 23,24 ,30,31	17	16
September	None	7(Pitch-in)	6,7, 20,21 ,27,28	14	13
October	1*	5	4,5,25,26	12	<i>TBD</i>
November	Oct 30	2	1,2,22,23,29,30	—	<i>TBD</i>
December	None	7 (Holiday Party)	6 ,20,21,27,28	—	<i>TBD</i>

Bold entries are DSO nights with larger than optimum moon phase



Photo by Grant Hiestand (M 106)

Miscellanea

Goethe Link Observatory

Observatory Address:

**Goethe Link Observatory
8403 N. Observatory Lane
Martinsville, IN 46151**

Latitude: 39 degrees, 33 minutes north
Longitude: 86 degrees, 24 minutes west
Phone: (317) 831-0668



Training programs are scheduled by the Observatory Manager as instructors are available and time permits, although other requests can override these sessions.

To schedule the use of the 36" telescope, two criteria must be met:

- There must be a trained telescope operator and at least one assistant present.
- Send an email to the Observatory Manager (link-observatory@iasindy.org) to confirm availability.

Please plan ahead! Last-minute scheduling requests may not get access.

IAS News & Views — The monthly newsletter can be found on our web site at www.iasindy.org. The *News and Views* welcomes articles of local astronomical interest, follow-up on IAS events, and want/for sale ads. Please submit articles to the editor in an email to editor@iasindy.org.

Membership information — Please send an email to membership@iasindy.org; our membership coordinator will respond promptly. Full instructions are also available under the “[Join the Society](#)” tab on our web site, where you can submit a [paperless membership form](#), e-pay your dues and/or make a donation.

Requests for Information — You may contact our officers, Board members, and Coordinators via our website at www.iasindy.org. Place your cursor on the “Home” tab and then select “Contact us.” Page down to the person you desire to contact and send an email message requesting information or a return telephone call. We will be happy to respond within a reasonable time frame.

Logo Clothing — The IAS has a supply of logo ware using [Mid-Central Trophy](#) in Kokomo, IN. Typically T-shirts, sweatshirts, polo shirts, and caps are available. Call Linda (765-453-5494), tell her this is an order for the IAS logo ware, discuss what you want and give her the size. She can determine the cost and shipping and mail the order directly to your home. All major credit cards are accepted.

July Calendar, 2024

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
30	1	2	3 IAS Boad Meeting 7:00 PM	4 	5 New Moon  Deep Sky Observing at Link	6 IAS General Mtg DSO at Link Observatory
7	8	9	10	11	12 DSO at Link Observatory/ West Park	13 First Quat  DSO at Link / McCloud Nature Park
14	15	16	17	18	19	20
21 Full Moon 	22	23	24	25	26	27
28 Last Quarter 	29	30 Indiana Family Star Party, Camp Cullom	31 IFSP	1 IFSP	2 IFSP	3 Link First Light 85 th Anniversary IFSP



Photo by Greg DeVries, M 57 Ring Nebula

Word Search - Key Link Telescope People

N J I X J B G O X F V Z C G E K B T D E
H A D D I R O O A N U R Q A T Y N W D Q
Y M M N Q E N I E X V Z Z I G C R S J T
C E G T W G H K V T O I N S B Q V X I T
Y S X P T I Z D M F H T O A A R G Q P H
K C J Q Y I L U K M U E C Z A A Z I Q W
X U H W S X P B W F J H L P K D S G A Z
T F U B N J L Y U Y A E R I F A A O Z R
A F P U N L A L E R R F C C N X M X E O
U E J K M C K U L V A R K Z R K W I O R
Z Y N T G L P E A H L C T D U N A P M E
Z U Q V E M S W O B Z A O P F M T F E N
E P R J P B A M R H N Y X G R K E M Z R
R E T R O P L L E S S U R O S B R S O U
N H B W L P J Z L X Z B T O T H S D M T
M T E W O L L E U T W C P Z J N A A P L
A R P D W L G W B U I Z G W C L O L V R
S M J Z K S Q G H V T K Y S M X D D L A
C H A R L E S H E R M A N N G E B M K C
P Z T D K F G B O Q F B X W I T F Z E N

AlveyPittman
CharlesHermann
RussellPorter
WilburACogshall

CarlTurner
GoetheLink
SamWaters

CharlesBowers
JamesCuffey
VictorMaier

Answers on last page.

Which Website Do I Use?

Website

Indiana Astronomical Society

<https://www.iasindy.org/>

Use website to

FAQ

New member application

Dues payment

Planetarium Virtual Sky

Observing Information

AstroNews

ias-indy.groups.io

For members only

Members' directory

Files on:

Astronomical subjects

Astrophotography

Collimation





Library holdings










Newsletter Archives





[IAS Facebook](#)

Public events

Sharing stories and photos

	IAS Officers	
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Vice President	Jim Smith vicepresident@iasindy.org	
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Secretary	Larry Cates secretary@iasindy.org	

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