

May/June 2023

Supernova 2023,IXF



Pinwheel galaxy on April 25, 2023 no supernova (Photo by Randy Harrison)



Photo of the pinwheel galaxy on May 25, 2023 indicating supernova 2023,IXF

A nearby star has exploded and humanity's telescopes are turning to monitor it. The supernova, dubbed SN 2023ixf, was discovered by Japanese astronomer Koichi Itagaki three days ago and subsequently located on automated images from the Zwicky Transient Facility two days earlier.

SN 2023ixf occurred in the photogenic Pinwheel Galaxy M101, which, being only about 21 million light years away, makes it the closest supernova seen in the past five years, the second closest in the past 10 years, and the second supernova found in M101 in the past 15 years. Rapid follow up observations already indicate that SN 2023ixf is a Type II supernova, an explosion that occurs after a massive star runs out of nuclear fuel and collapses.

SN 2023ixf will likely brighten and remain visible to telescopes for months. Studying such a close and young Type II supernova may yield new clues about massive stars and how they explode. (NASA.com)

The River's Edge

New Location and Old Friends:

Astronomy Day was held at a new location—Northtown Shopping Center in Highland. It was such a popular

location, we had a lot of attention that spilled over to Facebook comments and new events. We will have International Observe the Moon Night at this location on October 21st from 7 to 10pm.

We were pleasantly surprised to have a visit from members and former members we have not seen in a while. Mary Hebert, former club secretary, and Bruce Kryfka, former Olympic diver (inside joke) stopped by to talk about old times.

Carlyle Library Telescope Build

We are thrilled to learn that the board of the Case-Halstead Library in Carlyle has approved the purchase of a telescope and binoculars. SLAS, who handles the purchase and “build” events to prep these scopes has asked us or the library to provide a volunteer to make the equipment public-ready. Volunteers will be handling all steps of this process EXCEPT the technical work best done by experienced folks. Let Terry Menz (outreach@riverbendastro.org) know if you can help with this event on Tuesday, June 20, at the Oak Bend Branch Library, St. Louis County, 9 to no later than 1pm.

Stellar Event

A last-minute request by Mosaic Church in Highland was a fantastic example of what RBAC can accomplish. The theme for the church’s Vacation Bible School was Stellar and 24 hours before the event, we were asked to have a telescope viewing! The church was THRILLED that we were able to provide 3 volunteers with telescopes, they made a significant donation to the club. Thanks to our dedicated members for “getting’ ‘er done!”

Listening to a Daytime Meteor Shower

The Arietids meteor shower peaked on June 7, 2023, but this daytime meteor shower was made audible by using radio astronomy to listen to them! Dan Brandon has captured his livestream of this event and made it available on his YouTube Channel at <https://www.youtube.com/@danbrandon8545>. By using what is referred to as meteor scatter, one can listen to the meteor shower. He has a few recordings already captured on this channel.

SWIC Observatory

RBAC comes full circle! Our club started out at Belleville Area College, now known as Southwestern Illinois College. Randy Harrison was asked by the current astronomy professor to service the telescopes in their observatory. He was able to clean and repair their scopes to working condition. Their inventory is pretty impressive boasting a 16” Dob, a 12” Meade, a 10” Meade, and an 8” Meade. Hopefully we can work with them in the future to cultivate some young astronomers!

Around town

Terry Menz will be presenting Greek Stories in the Stars on Wednesday, June 21, 2023 at 8pm. The program will be broadcast live on the Library Facebook page as well as on Zoom. Contact Terry for link to Zoom meeting. It will also be available on YouTube after air date and a link will be posted on the RBAC website.

Annular Eclipse: Stay tuned for details of the site for the public event on October 14 that RBAC is planning!

Eclipse Give-a-Ways:

Stay tuned for an exciting give-a-way for our upcoming outreach programs! Dan Brandon designed an awesome bookmark using his footage from the 2017 eclipse. Randy Harrison is working with a printer to have these ready to distribute.

Eclipse Shirts: A new design for the 2024 shirts was developed by Jeff Menz and Dan Brandon. The design was approved at the May 20th meeting. Prices are to be determined. Watch for more information!



Front



Back

Eclipse Expo: The program for the Eclipse Expo on July 22nd is now available at SEM OEclipseExpo.org. Location: Missouri Solar Eclipse Expo Show Me Center 1333 N. Sprigg St., Cape Girardeau, MO 63701 Learn more and get your tickets at SEM OEclipseExpo.org.

By the Way

Dues and Don'ts:

The Board recommended and the membership voted on April 22 to approve a membership dues increase to \$40 per year

starting in 2024. Dues have not been increased since inception of the club and the new rate is comparable to other astronomy clubs. The rate increase was considered essential to allow the club to acquire year-round liability insurance for our outreach events.

Gallery

Yuri's Night, Trenton, IL



Dave Kirsch setting up. (Photo by Jeff Menz)



RBAC members setting up. (Photo by Jeff Menz)

Girl Scout Training Institute, Collinsville, IL



Terry Menz setting up display. (Photo by Jeff Menz)

**SIUE Lifelong Learning
Institute, Edwardsville, IL**



Randy Harrison. (Photo by Terry Menz)



Jim Reagan (Photo by Terry Menz)



Jeff Menz (Photo by Terry Menz)

**Columbia Middle School
Salt Lick Trailhead, Valmeyer, IL**



Dave Kirsch setting up. Note very noisy train in background. (Photo courtesy of Mike Donaldson)



Randy Harrison. Who? Me? (Photo courtesy of Mike Donaldson.)



Jeff Menz. (Photo courtesy of Mike Donaldson)

Astronomy Day, Highland, IL



L to R: Mike Veith, Mary Hebert, and Jim Reagan. (Photo by Mike Donaldson)



Randy Harrison (Photo by Mike Donaldson)



Jeff Menz (Photo by Mike Donaldson)



Dan Brandon (Photo by Mike Donaldson)



L to R: Cheryl Brinkmann, Terry Menz. (Photo by Mike Donaldson)

Highland Middle School, Highland, IL



L to R: Jeff Menz, Jim Reagan, Mike Veith. (Photo by Elizabeth Weder)



Terry Menz discussing gravity and black holes. (Photo by Elizabeth Weder)



Karen Fajardo playing Supernova Game with students. (Photo by Elizabeth Weder)

Scott Air Force Base Air Show Belleville, IL



L to R: Deb Kirsch, Terry Menz. (Photo by Jeff Menz)



Air Show highlights. (Photo by Randy Harrison)



L to R: Cheryl Brinkmann, Terry Menz, and Jeff Menz. (Photo by Randy Harrison)

ASTROPHOTOS



Waxing one-day-old Moon taken with Samsung Galaxy A 21 using SCT LX5 10-in. (Photo by Jeff Menz)



Venus in last quarter phase taken with Samsung Galaxy A 21 using SCT LX5 10-in. (Photo by Jeff Menz)

AWARD PHOTOS



Cheryl Brinkmann receiving her Basic Award. (Photo by Jeff Menz)



L to R: Randy Harrison (Master), Rich Dietz (Basic), Dave Kirsch (Stellar). (Photo by Jeff Menz)

New Members: Mark Murray (Godfrey)

Upcoming Events:

- Telescope build session, Tuesday, June 20, Oak Bend Branch Library, St. Louis County, 9 to NLT 1pm. **Volunteer to attend and work on Carlyle Library Telescope needed.**
- Highland Garden Club, Viewing at Korte Rec Center parking lot next to Glik Gardens. Thursday, June 22, 7:30pm after Garden Club meeting.
- NASA/JPL at SLAS Meeting Fri., June 23, re: Mars Rover & Helicopter. Details TBD. Go to SLASonline.org for information.
- Girl Scouts Out of this Day Space Camp, June 29th, 9:30 to 2:30pm, Konarcik Park, Waterloo
- St. Francis VBS, Wed, Jul 12, 9:15-9:45am, Aviston
- RBAC Meeting, Sat, Jul 15, 7pm, Salem UCC, Alhambra

- Exploring the Night Sky: Carlyle Lake Visitors Center, Carlyle, Saturday, July 22, 7pm-10pm
- Lunch and Learn, Wed, August 2, 11:30am to 1pm, Main Street Community Center, Edwardsville
- RBAC Meeting, Sat, August 12, 7-9pm, Salem UCC, Alhambra
- Public Viewing, Ballard Nature Center, Sat, Aug 19, Altamont

Make Your Own Image of the Phantom Galaxy with NASA's Astrophoto Challenge



Join NASA's Universe of Learning for an exciting opportunity to use real astronomical data and tools to create your own images of the Phantom Galaxy, also known as M74. Use your images to explore the mysterious structures within this galaxy, or just create an image that you think is beautiful. You can capture your own real-time telescope image of M74 using the MicroObservatory robotic telescope network. You can also work with an archived set of multiwavelength data files of M74, taken with NASA, ESA, and CSA space telescopes (Webb, Hubble, Chandra, Spitzer, and XMM-Newton).

The challenge is open from May 15, 2023 through July 31, 2023. Enter the challenge, here: <https://mo-www.harvard.edu/OWN/astrophoto>

BIENVENUE EN LOUISIANE! (WELCOME TO LOUISIANA!)
Join us for this unique and exciting amateur astronomy gathering!



ALCON 2023



July 26–29, 2023
Hilton Baton Rouge
Capitol Center Hotel
201 Lafayette Street
Baton Rouge, LA 70801

KEYNOTE SPEAKERS

- ★ David Elcher—writer, editor-in-chief of *Astronomy Magazine*
- ★ Fred Espenak—co-author of *Totally: The Great American Eclipses of 2017 and 2024*
- ★ David Levy—author, comet hunter

FIELD TRIPS

- ★ Irene Pennington Planetarium
- ★ LIGO Laser Interferometer Gravitational-Wave Observatory (Livingston*)
- ★ Louisiana State University Physics & Astronomy
- ★ Highland Road Park Observatory

*Spaces are limited for this trip!

SPEAKERS ★ Pranvera Hyseni ★ Guy Consolmagno ★ Dan Davis ★ And many more!

Brought to Baton Rouge by the Baton Rouge Astronomical Society

★★ Registration is now open! Check alcon2023.org ★★



**A free event,
View the Moon,
Saturn, Star
Clusters, Nebulas**

**Prizes
Food Trucks
Family Friendly**

**Broemmelsiek
Park Astronomy
Site
1611 Schwede Rd
Wentzville, MO
63385**

**ASTRONOMICAL
SOCIETY OF EASTERN
MISSOURI**

**QUESTIONS? EMAIL
QUESTIONS@
ASEMONLINE.ORG-**



**SATURDAY, SEP. 16, 2023
4PM-9PM
JOHN DOBSON'S
BIRTHDAY
CELEBRATION**

John Dobson taught how to make inexpensive large telescopes, accessible to everyone.


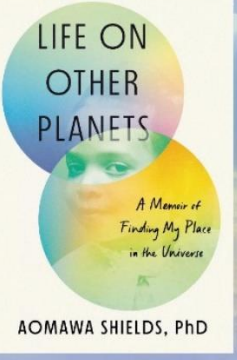
Would you like help using or setting up your telescope? Bring it along and ASEM pros can help you with it.

SCAN ME

St. Louis County Library and the Saint Louis Science Center
Present:

ASTROBIOLOGIST DR. AOMAWA SHIELDS

Author of "Life on Other Planets: Finding My Place in the Universe"

**LIFE ON
OTHER
PLANETS**

*A Memoir of
Finding My Place
in the Universe*

AOMAWA SHIELDS, PhD

Books for signing
will be available
for purchase

Monday, July 17, 7:00 p.m.
(Free Event! Doors open at 6:00 p.m.)

Saint Louis Science Center OMNIMAX® Theater
5050 Oakland Ave. • St. Louis, MO 63110 • 314-984-3300

St. Louis County Library SAINT LOUIS SCIENCE CENTER NOVEL RECORDS

Program fees are acceptable. VIPs at least two weeks' notice. Accommodations will be made for persons with disabilities. Call 314-694-3300 or visit www.slscc.org