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# FLINT RIVER OBSERVER

**NEWSLETTER OF THE FLINT RIVER ASTRONOMY CLUB**

**An Affiliate of the Astronomical League**

**Vol. 25, No. 8 August 2021**



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## Club Calendar:

**FRAC Observing**: Club observing weekend, Friday and Saturday August 6-7, 2021, at Joe Kurz WMA, sunset until whenever.

**FRAC Meeting:** Thursday, August 12, 2021, 7:30pm at the UGA Gardens in Griffin and on Zoom.

Our program this month will be an Astronomy trivia night on Zoom and Kahoot! If you are on Zoom, you will need nothing else. If you are in person, please be ready with your phone or other mobile device.

**Public Observing Event:** Friday, August 13, 2021, 8pm. Fayette County Rec Department stargazing event at Lake Horton in Fayetteville. There are over 150 guests signed up for this event so please come, if at all possible.

**Public Observing Event:** Saturday, August 28, 2021, 8:30pm. Sprewell Bluff Park stargazing event at Sprewell Bluff Park in Thomaston.

Please keep checking your email for updates regarding club events.

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## Trivia:

What were the first two elements in the universe?

How massive does a star have to be to go supernova?

What planet has the shortest day?

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## President's Message:

Hello FRAC Members,
This past month FRAC held our meeting in person and on Zoom simultaneously for the first time, and despite some minor technical difficulties it went quite well. This meeting was very significant in my opinion, since it was not only the first time we have done this, but the first time we met in person since February of 2020. Thank you to everyone who participated.

I would really encourage you to join us this month, either in person or at home through Zoom. If you do not have Zoom, it is free on your computer or phone. The meetings are accessible from the invitation links sent out about a week before the meeting. You can download to your computer from the link below:
Zoom Client Download Page

This month, I will attempt to host a trivia night for both our in-person members and those participating remotely. Hope to see you there!

One last reminder. We are getting back to holding public events again. I have asked the coordinators for these events to inform all guests that they need to be wearing masks while in line or at a telescope. If you are available, please come out and show our guests the stars again this month.

Sean

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## Previous Meetings/Activities:

FRAC Meeting - July 8, 2021 - 7:30pm on zoom.us and in-person at the UGA Garden in Griffin, GA

- 11 club members attended our meeting in person: Mark Grizzaffi, Tom Moore, Steve Benton, Steve Hollander, Felix Luciano, Alfred McClure, Kelly Mallard, Michael Basmajian, Aaron Calhoun, Sean Neckel, and George Ruff.

- 6 club members joined us through Zoom: George Clifford, Chelsea Neckel, Bill Evans, Elaine Stachowiak, Gianna Neckel, and Alan Pryor.
- Member George Ruff gave a great presentation on meteors, meteoroids, and meteorites, including the history of impacts and finding meteorites. He also brought with him a number of meteors that he has collected.

**FRAC Observings**:
The July club observing nights on the 9th and 10th were a mix of clouds and rain.

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## Solar System Observing – August 2021

**Mercury** is not observable, as it is very close to the sun.
**Venus** is visible in the evening sky, setting about 90 minutes after the sun.
**Earth** from 6 billion kilometers away is just a pale blue dot.
**Mars** is close to the sun and not observable.
**Jupiter** rises about 10:30pm and will be visible until dawn. Opposition is 8/19.
**Saturn** rises about 9:30pm and will be visible until dawn. Opposition is 8/2.
**Uranus** is visible with a telescope from around 1am until dawn.
**Neptune** is visible with a telescope from around 11pm until dawn.
**Moon**: New: 8/8 FQ: 8/15 Full: 8/22 LQ: 8/30
https://in-the-sky.org/

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## Classifieds:

If you have something you would like to buy, sell, or trade, email the specifics, including your contact information to stneckel@gmail.com

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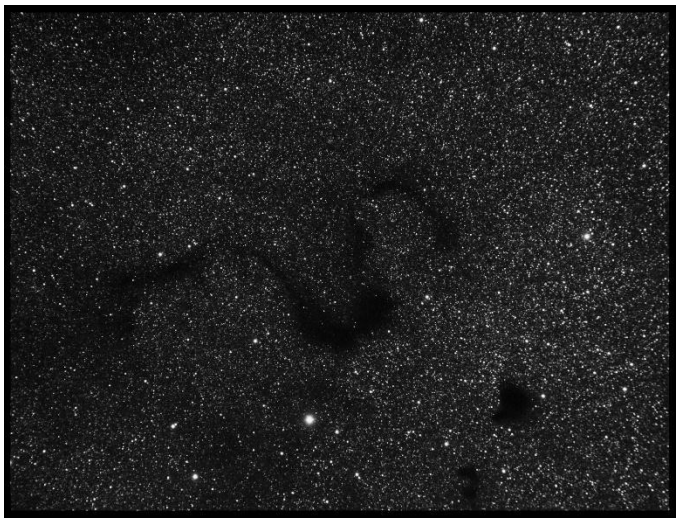
NGC 6992, Courtesy of Alan Pryor

10,000 to 20,000 years ago a star that was relatively close to us exploded in a supernova. When it did it shot out much of its matter in a radial fashion that appears as an ever-expanding ring. That ring is known as the Veil Nebula. This is one section of that ring. It started out small and it has grown to a huge size over time. If you could see it visually it would be 6 times the diameter of the moon, but it is very faint. Even my scope is challenged to pick it up.

This nebula is in the constellation of Cygnus. It is 2400 lightyears away, and it has a diameter of 130 lightyears. As a comparison the moon is visually 0.5 degrees in diameter and the Veil is 3 degrees in diameter visually.

The full-size photo can be seen at the following link:
NGC 6992



Barnard 72, the Snake Nebula, Courtesy of Felix Luciano

From Wikipedia:
The **Snake Nebula** (also known as Barnard 72) is a dark nebula in the Ophiuchus constellation. It is a small but readily apparent SP-shaped dust lane that snakes out in front of the Milky Way star clouds from the north-north-west edge of the bowl of the Pipe Nebula. Its thickness runs between 2′ and 3′ and runs around 6′ in the north-west / south-east orientation. A good view in a 4" to 6" telescope requires clear dark skies.

The full-size photo can be seen at the following link:
Barnard 72

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## Trivia Answers:

Hydrogen and helium. From the big bang.

8 times the mass of the sun

Jupiter with a day of 10 hours.

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