

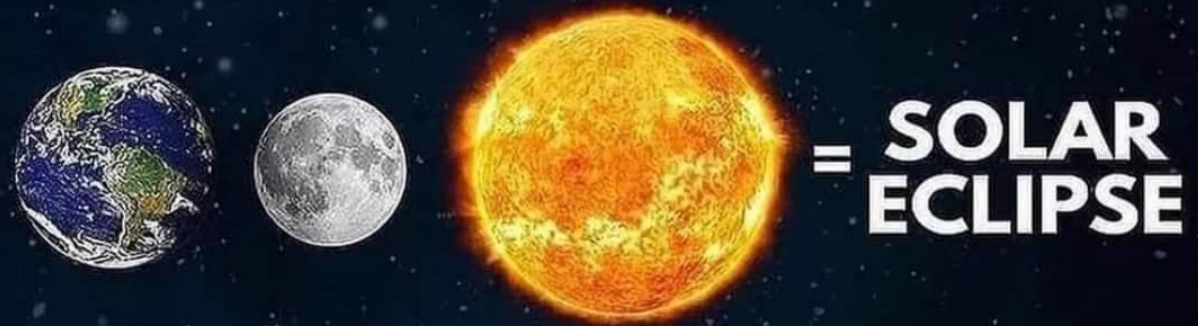
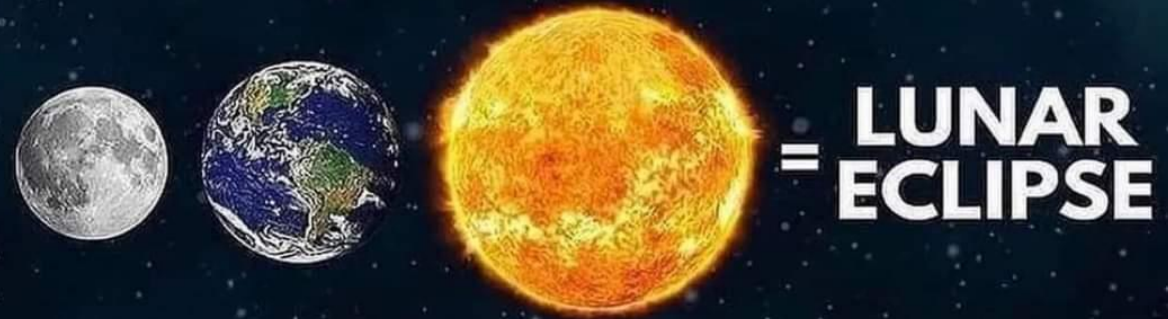
# Howard Astronomical League

May 19, 2022



# Astro Humor

High resolution image of Jupiter



# Astro Humor Continued...

Night sky on **Normal Day**



[thesciencepie.com](http://thesciencepie.com)

Memegenerator.com

On any **Astronomical** event



# Welcome New Members and Guests



# HAL Public and Members Only Star Parties



## 2022

May	21	Members
June	11	Public
June	25	Members
July	9	Public
July	23	Members
August	6	Public
August	27	Members
September	3	Public
September	24	Members
October	1	Public
October	22	Members
November	5	Public
November	19	Members

## HAL Officers/Positions 2022

<b>President</b>	Phil Whitebloom	president@howardastro.org
<b>1st Vice President</b>	Victor Sanchez	1stvp@howardastro.org
<b>2nd Vice President</b>	Jim Tomney	2ndvp@howardastro.org
<b>Treasurer</b>	Joel Goodman	hal_treasurer@howardastro.org
<b>Secretary</b>	Yvonne Chiarelli	secretary@howardastro.org
<b>Event Coordinator</b>	Richard Ren	events@howardastro.org
<b>Publicity Chair +</b>	TBD	publicity@howardastro.org
<b>Social Media +</b>	Hannah Broder	socialmedia@howardastro.org
<b>Observatory Director *</b>	Victor Sanchez	observatory@howardastro.org
<b>Librarian +</b>	Bob Dutilly	librarian@howardastro.org
<b>ALCor +</b>	Steve Jaworiwsky	halcor@howardastro.org
<b>Webmaster *</b>	Ken Sall	Use "Contact Us" Page

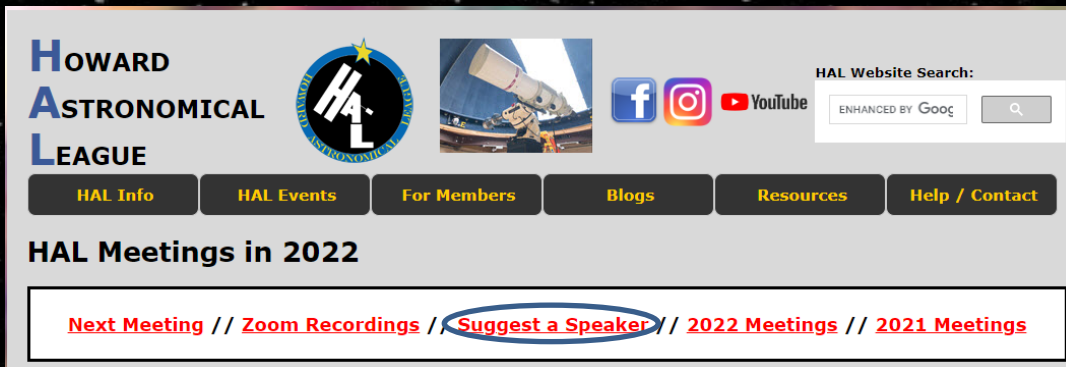
\* Appointed as voting officers of the board of directors by President with board approval

+ Appointed non-voting member of the board except when position filled by an elected officer






# Do you know a future HAL Presenter?

Let us know:  
<https://bit.ly/HALspeaker>

You can also find the link on  
the HAL website under HAL Events  
In the Our Meetings section



HOWARD  
ASTRONOMICAL  
LEAGUE



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HAL Meetings in 2022

[Next Meeting](#) // [Zoom Recordings](#) // [Suggest a Speaker](#) // [2022 Meetings](#) // [2021 Meetings](#)

HOWARD  
ASTRONOMICAL  
LEAGUE



## HAL Speaker Suggestion Form

For HAL members or public to recommend an astronomy-related speaker for a future General Meeting (third Thursday every month).

NOTE: Only a few fields below are required, as denoted by a red asterisk.

[Sign in to Google](#) to save your progress. [Learn more](#)

\* Required

Your Name \*

Your answer

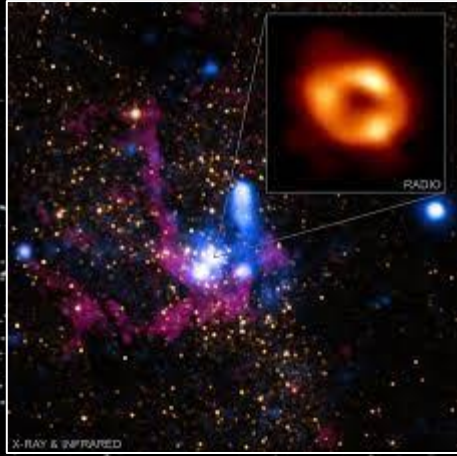
Your Email \*

Your answer

Suggested Speaker's Name \*

Your answer

# In the News



# Sagittarius A

Einstein was right again!



The 10-meter South Pole Telescope at Amundsen-Scott South Pole Station in Antarctica was one of eight telescopes to observe Sagittarius A\*. Credit: Keith Vanderlinde





These are not the four  
Kidney stones Phil battled with last week.

Rumor  
Control

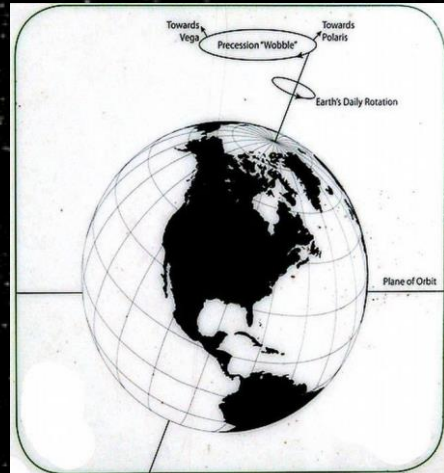


**Scientists Found an Extraterrestrial Stone in Egypt That Might Prove That a Rare Supernova Took Place**

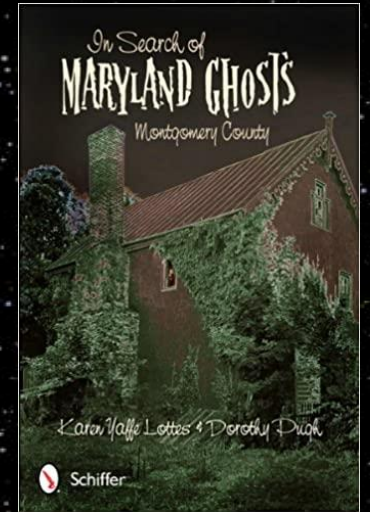
# Tonight's Presenter

**Karen Yaffe Lottes**  
Gaithersburg Community Museum

**Topic: International Latitude  
Observatory**



*As the Earth rotates on its axis it exhibits a wobbling motion. This wobble is named The Chandler Wobble, after its discoverer, Seth Carlo Chandler, Jr.*



# HAL Astro-Images, Sketches, and More



# Picot 1

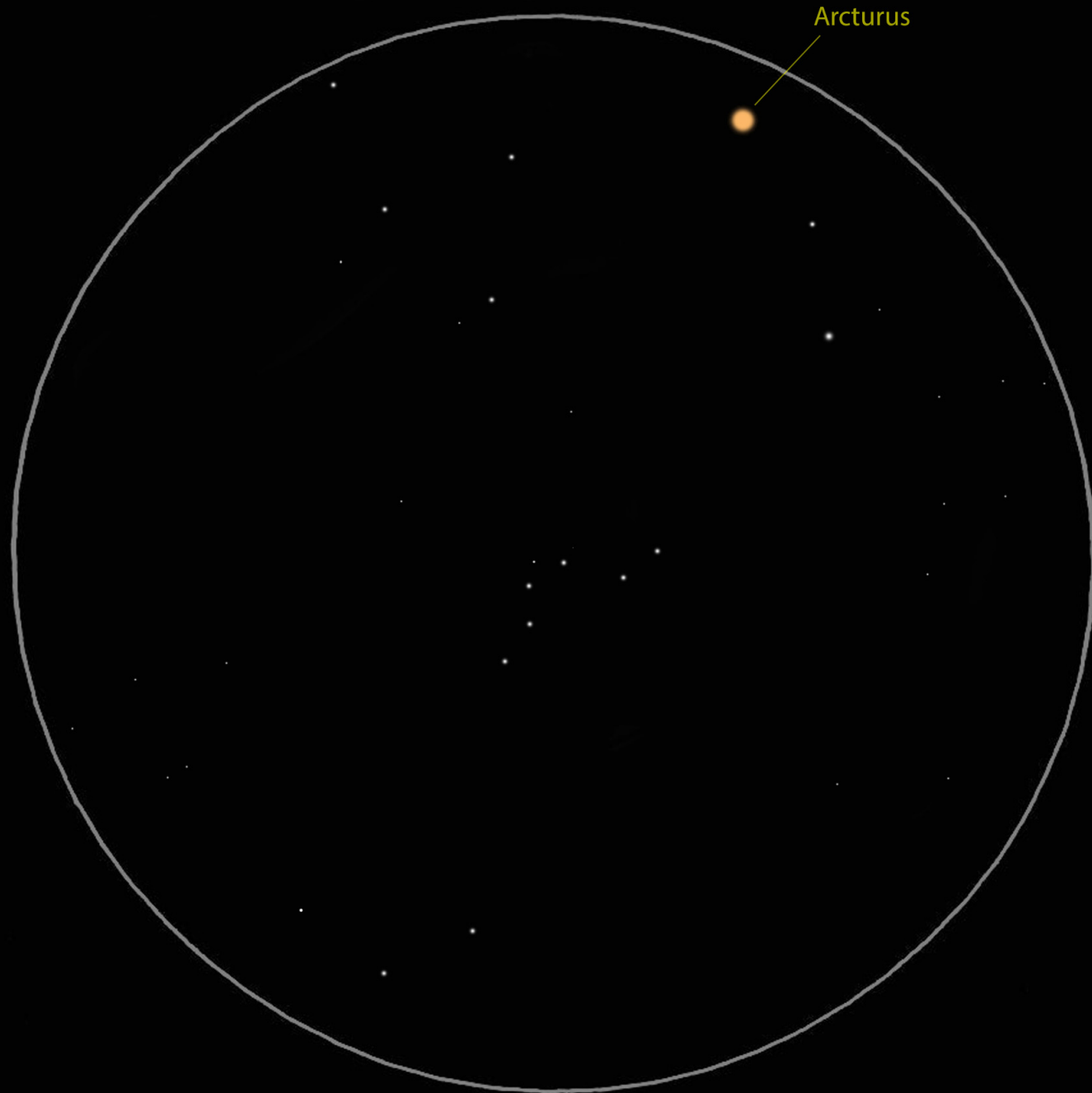
Asterism

Constellation: Bootes

Other Names: Napoleon's Hat  
Celestial Inch-worm  
Celestial Slinky

Telescope: 155mm refractor  
Eyepiece: 21mm Ethos (52x)  
Field of View: 1.9 degrees  
Orientation: Diagonal View

Date: 29-April-2022  
Time: 02:00 to 02:45 EDT  
Location: Deck of House  
Drawing by: Richard Orr





James Willingham



May 15th 2022 @ 11:35pm EST  
@JamesWillinghan



May 15th 2022 @ 11:46pm EST  
@JamesWillinghan



James Willingham





David Stein

## Globular M3

Date: 2022-04-28

From: Towson (Bortle 8)

Seeing: Avg; Trans: Good

Scope: 80mm f7/5 Vixen

Filter: Baader Moon & Skyglow

Camera: Canon EOS t6s

Mount: Celestron CGX-L

Guiding: None

Exposure: 177 x 30sec  
(01:28:30)

Processing:

- DSS
- PixInsight
- Adobe Photoshop

*Jim Tomney*





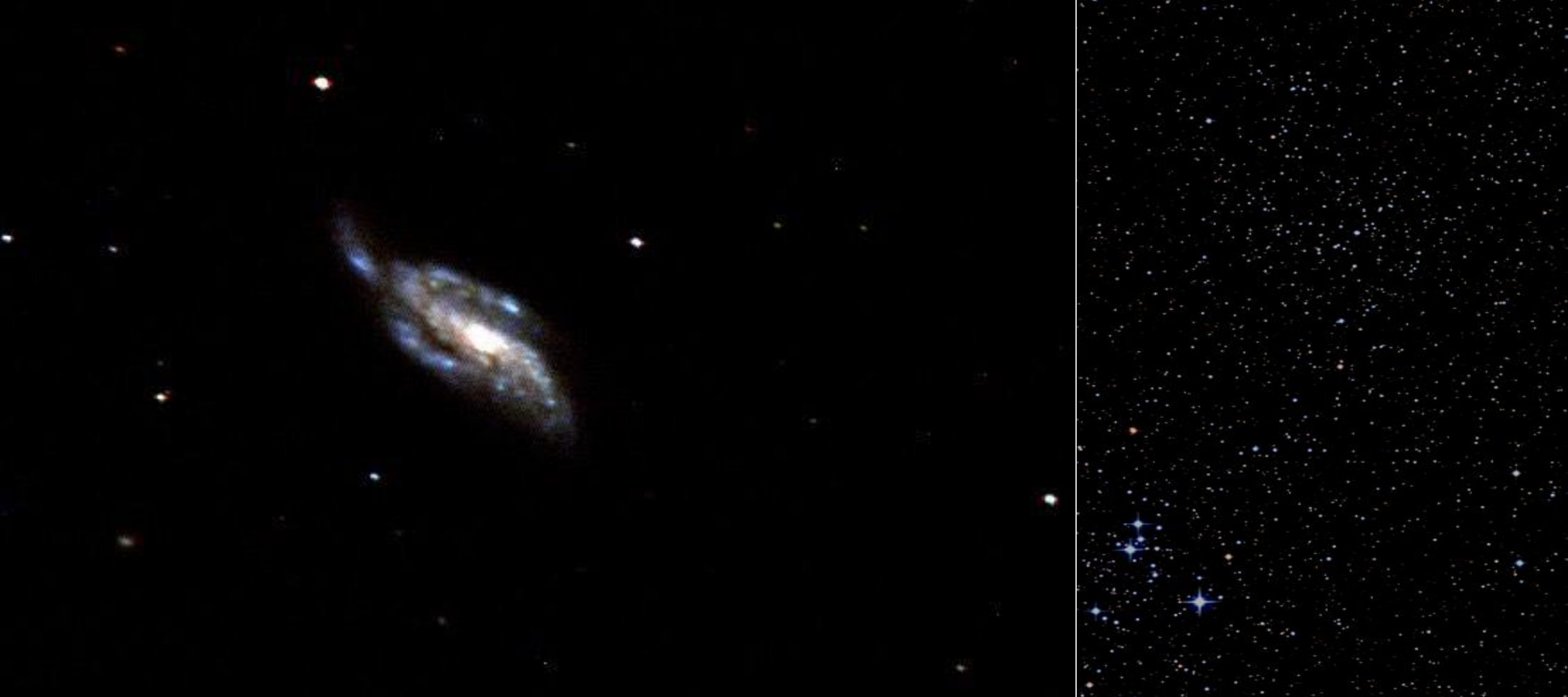
<b>M51 (Whirlpool Galaxy)</b>	<b>8-inch F/8 RC</b>	<b>ASI1600MM-C</b>
<b>April 29, 2022</b>	<b>LRGB (20, 8, 10,10)x4min</b>	<b>Gain 0, 139</b>
<b>Alpha Ridge Park</b>	<b>3h 12m Total Exposure Time</b>	<b>Wayne Baggett</b>



Brad Martin




Brad Martin



Supernova - This is NGC 4088 (spiral galaxy about 50 Mly away) and supernova SN 2022jzc. This image is a composite of one each Sloan G (240 sec), Sloan R (240 sec) and Sloan I (600 sec) filter individual images combined in SAO ds9 software. The supernova is slightly southeast of the galaxy's core.

Chuck Cynamon



David Stein, Cheryl Kerr, Atul Agrawal –  
HALO – M86

Asteroid 471 Papagena  
HALO

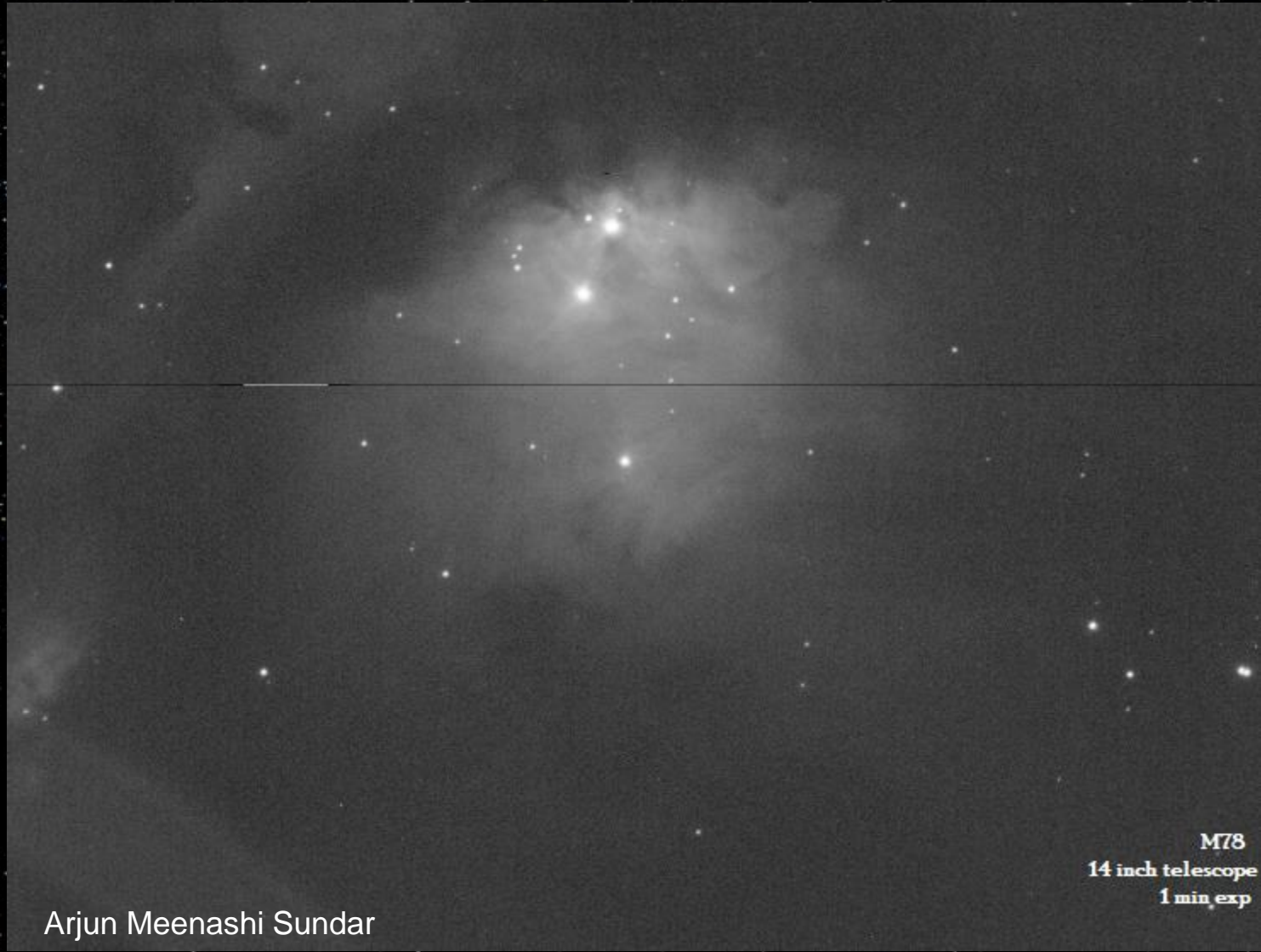


Arjun Meenashi Sundar

Asteroid 1182 Ilona  
HALO



Arjun Meenashi Sundar



Arjun Meenashi Sundar

M78  
14 inch telescope  
1 min exp



Orion nebula  
14 inch telescope  
3 mins exp



Arjun Meenashi Sundar

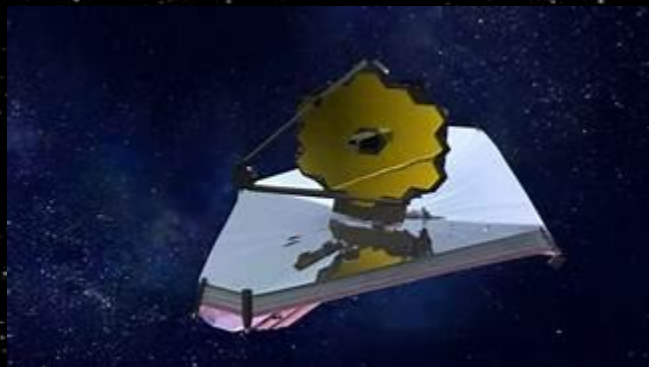




Steve Bilanow



Thank You



CLEAR SKIES!