

Howard Astronomical League



May 21, 2020

Astro Humor

**BREATHTAKING VIEW OF THE
MILKY WAY**



SEEN FROM MARS

HAL OFFICERS

HAL Officers/Positions 2020

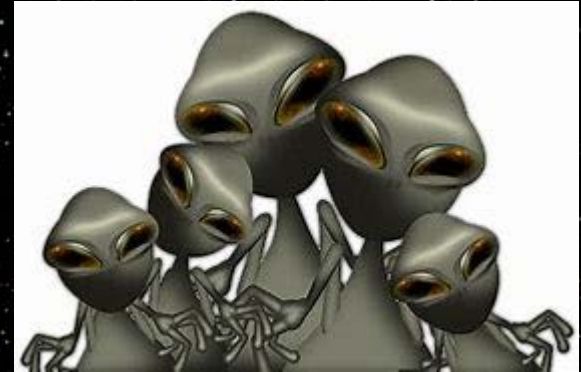
President	Phil Whitebloom	president@howardastro.org
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2nd Vice President	JoAnn Shapiro	2ndvp@howardastro.org
Treasurer	Joel Goodman	hal_treasurer@howardastro.org
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Publicity Chair +	Joel Goodman	halpublicity@howardastro.org
Observatory Director *	Joel Goodman	observatory@howardastro.org
Librarian +	Bob Dutilly	librarian@howardastro.org
ALCor +	Steve Jaworiwsky	halcor@howardastro.org
Webmaster *	Chas Rimpo	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

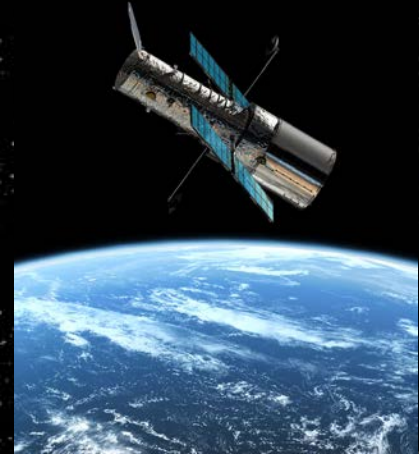
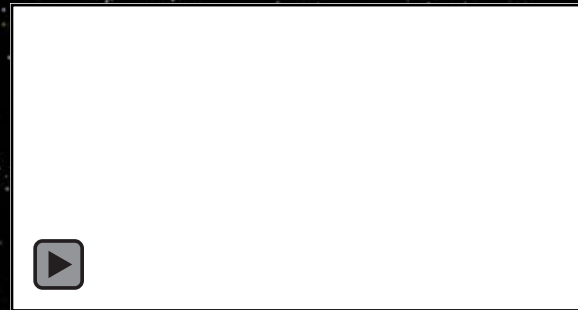
AstroSchool Virtual

Thanks to Jim Johnson for
leading a three part series on
The Celestial Sphere



Coming Soon to a Screen in
Your Home

Star Party Virtual



Tonight's Guest Presenter

Dr. Michelle Shinn

Small Business Innovation Research Program

U.S. Department of Energy

Office of Nuclear Physics

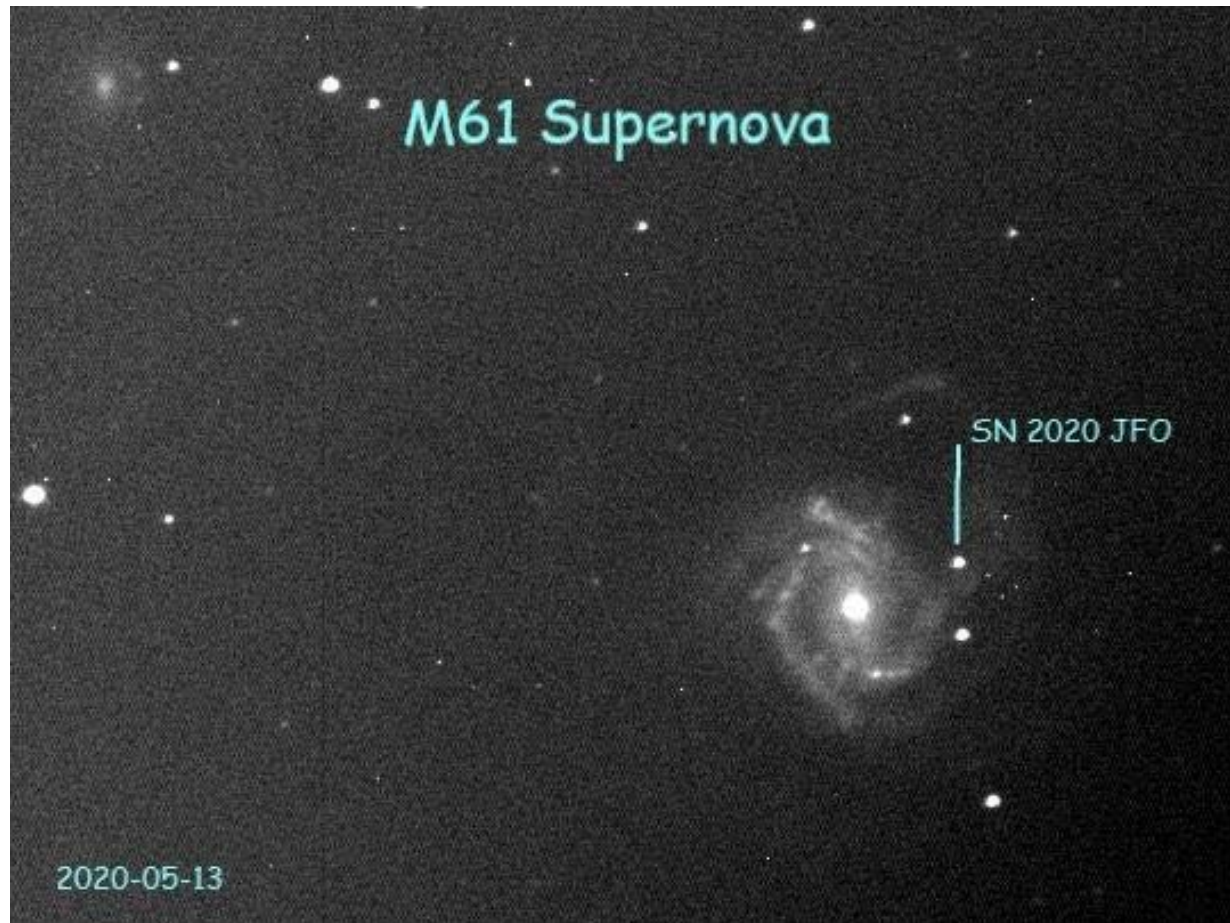
Title: Star Archeology – The Search for the Oldest Stars in the Universe

HAL Members Astro Art



Here's a V-filter image of SN 2020jfo from which Chuck transformed differential photometry to determine the supernova was 14.6 magnitude on 13 May 2020, approximately one week after the event was detected. He collected V and R filter data for several nights after this to confirmed that the supernova was fading at about 0.1 mag/day per the standard Type II supernova light curve predicts.

SN 2020jfo is a Type II supernova, as determined by spectrometry, meaning it's a result of the cataclysmic end of a massive single star. Note that the 2014 supernova in M61 has faded substantially as SN 2020jfo will do over the next 100 days until it's approximately 22nd magnitude.



Chuck Cynamon



Victor Sanchez



**Double Cluster (NGC 884 above NGC 869) | Object type: Open Cluster | Constellation: Perseus | Distance: 7,500 light years
Nikon D850 | 300mm prime lens | f/14 | ISO 500 | 40' total exp | 2020-03-15 | Severn, MD**

Jim Lane

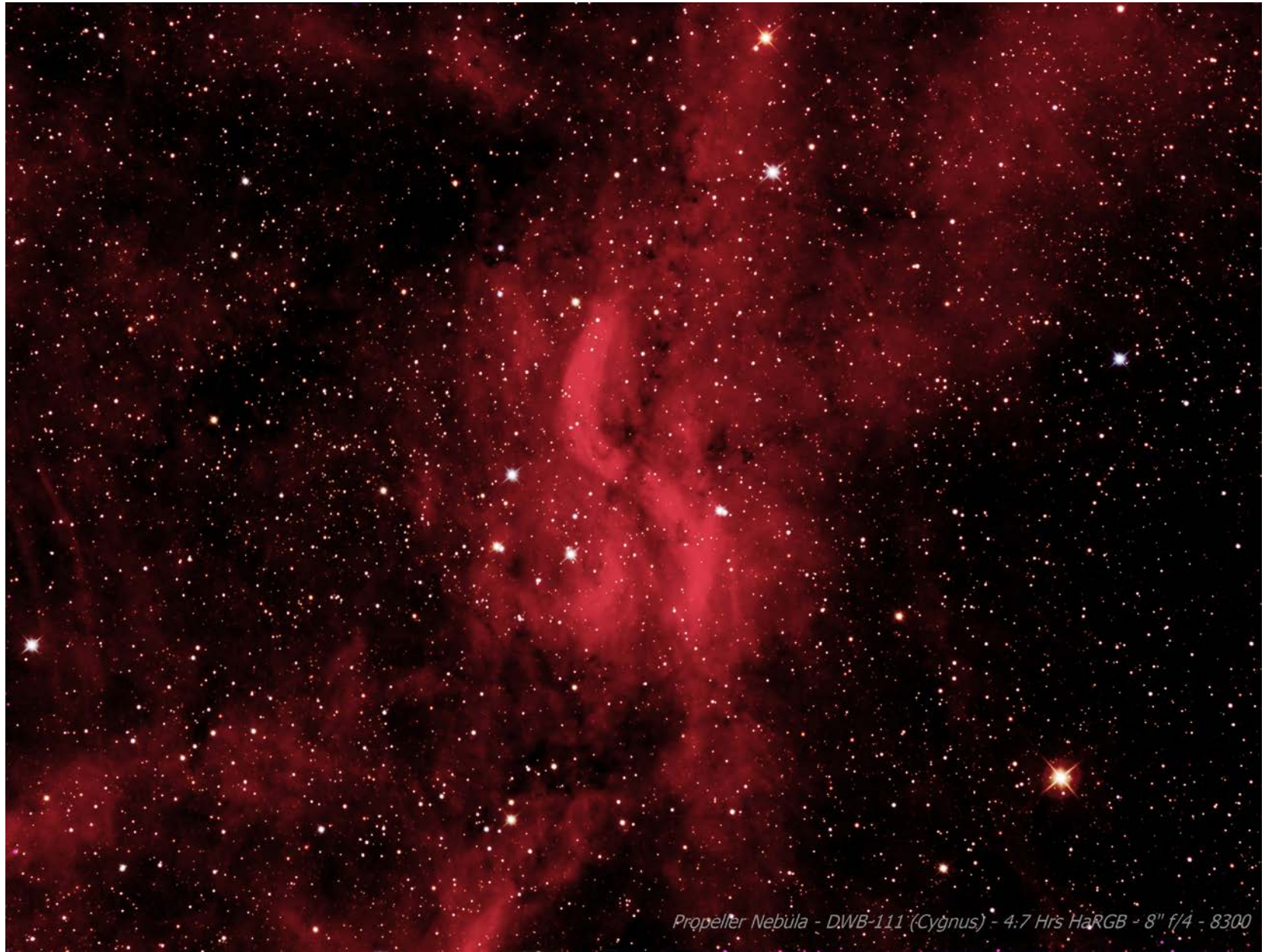


NGC 457 ("Owl Cluster") | Object type: Open Cluster | Constellation: Cassiopeia | Distance: 5,219 light years
Nikon D850 | 300mm prime lens | f/14 | ISO 1000 | 5' total exp | 2020-02-22 | Odenton, MD

Jim Lane

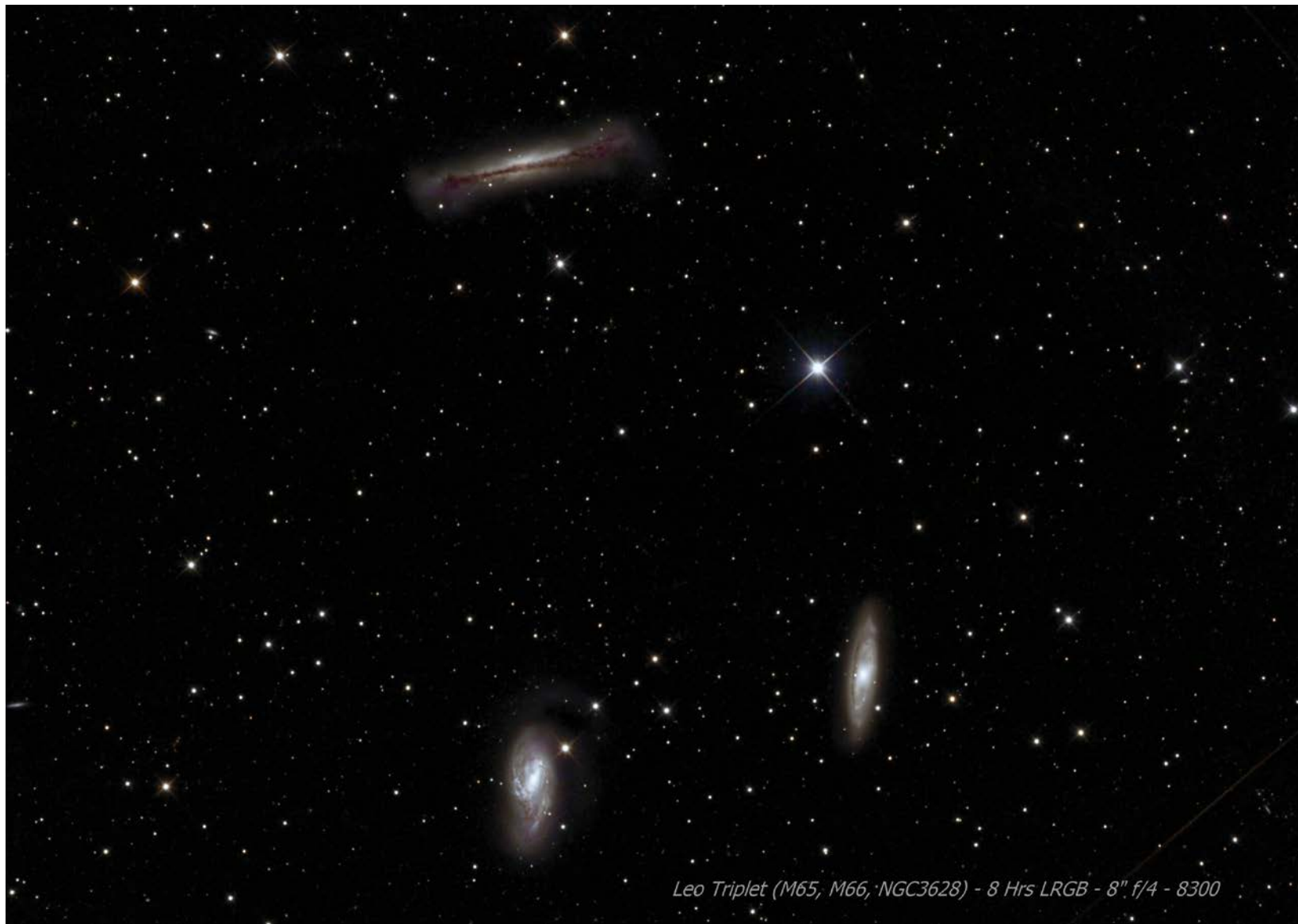


Gene Handler



Propeller Nebula - DWB-111 (Cygnus) - 4:7 Hrs HaRGB - 8" f/4 - 8300

Gene Handler



Gene Handler

Crescent Venus in Daylight

Jim Johnson, Ashton, MD

2020-05-15 1556 EDT

Tele Vue NP101is/2x PowerMate

Canon EOS 60Da





James Willingham



James Willingham

June Guest Presenter

June 18, 2020

7:00PM

Dale Ghent

Topic: "NINA Software and Astro Imaging Apps

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Thank To All of You

Stay Healthy

Stay Safe

Clear Skies