Howard Astronomical League



February 21st, 2019

Introductions

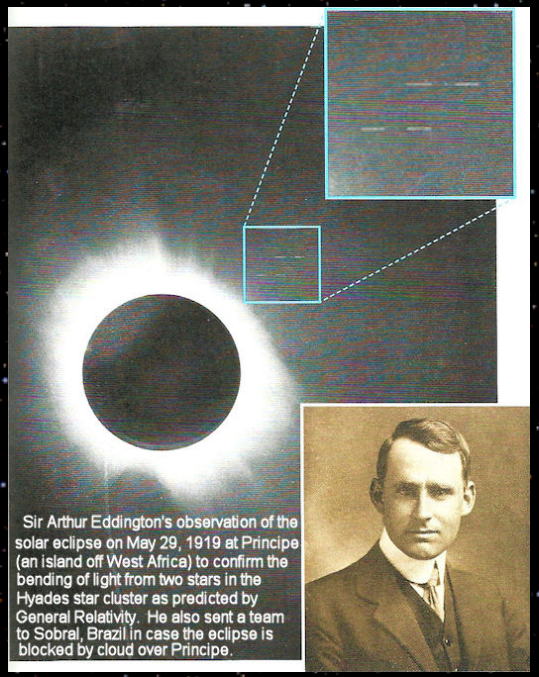
To change it up, we are going to:

- **Turn off the lights**
- **Say "hello"**
- **And we will see who could guess who you are?**

Astronomy News – 100 Years Ago

1919

February 1919 Arthur Eddington an English astronomer departed on his expedition to the island of Principe (off the west coast of Africa). Eddington's enthusiasm and promotion of the work in the Royal Astronomical Society in 1917 pushed him to be granted permission to test the theory of bending light "out in the field". The eclipse on May 29th, 1919 was chosen at the time the sun would be right in front of a prominent group of stars known as the Hyades. Positions of star images within the field near the sun were used to verify Albert Einstein's prediction of the bending of light around the sun from his general theory of relativity.

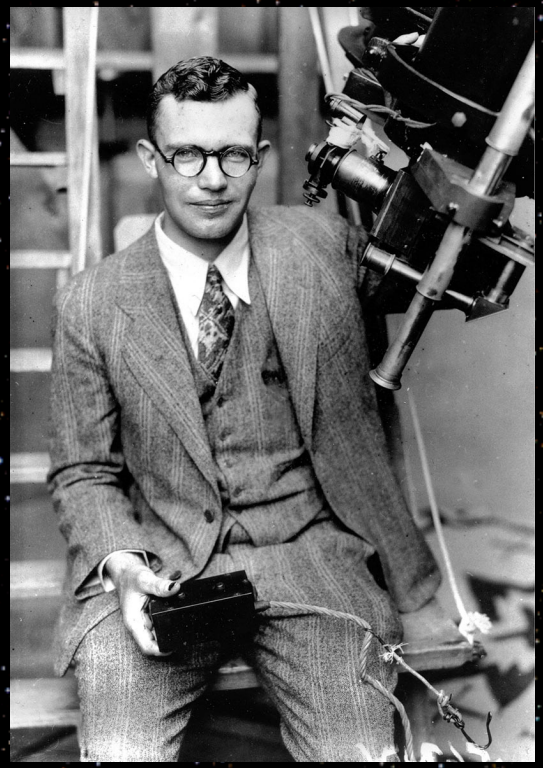


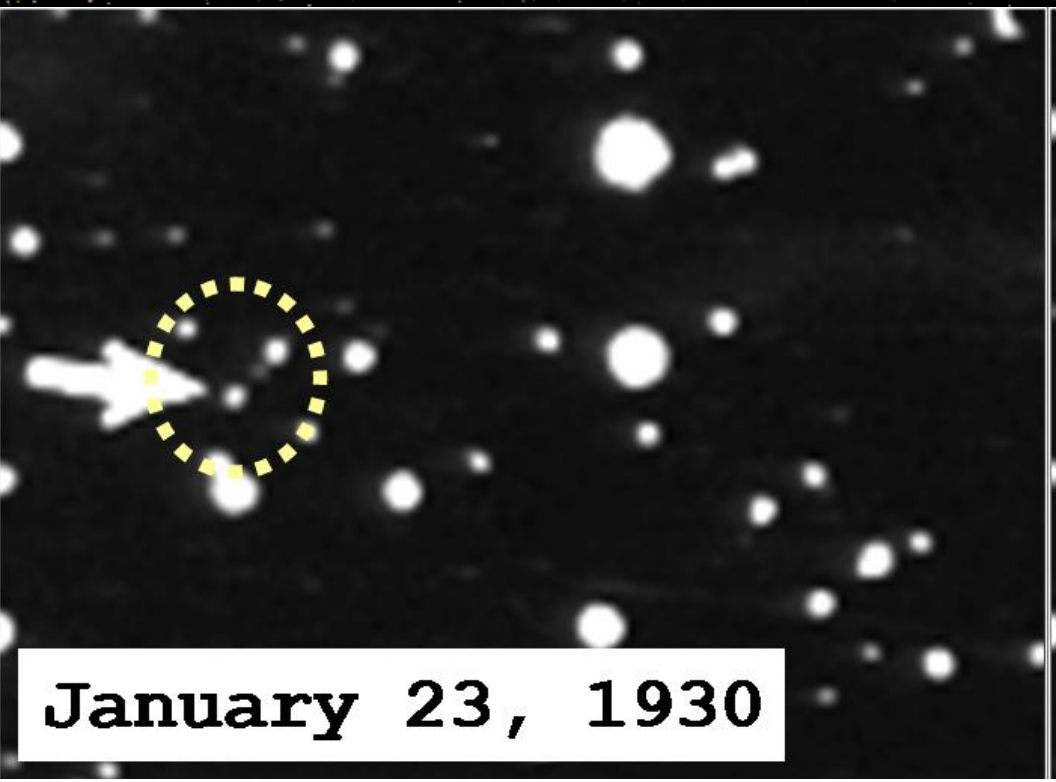
Sir Arthur Eddington's observation of the solar eclipse on May 29, 1919 at Principe (an island off West Africa) to confirm the bending of light from two stars in the Hyades star cluster as predicted by General Relativity. He also sent a team to Sobral, Brazil in case the eclipse is blocked by cloud over Principe.

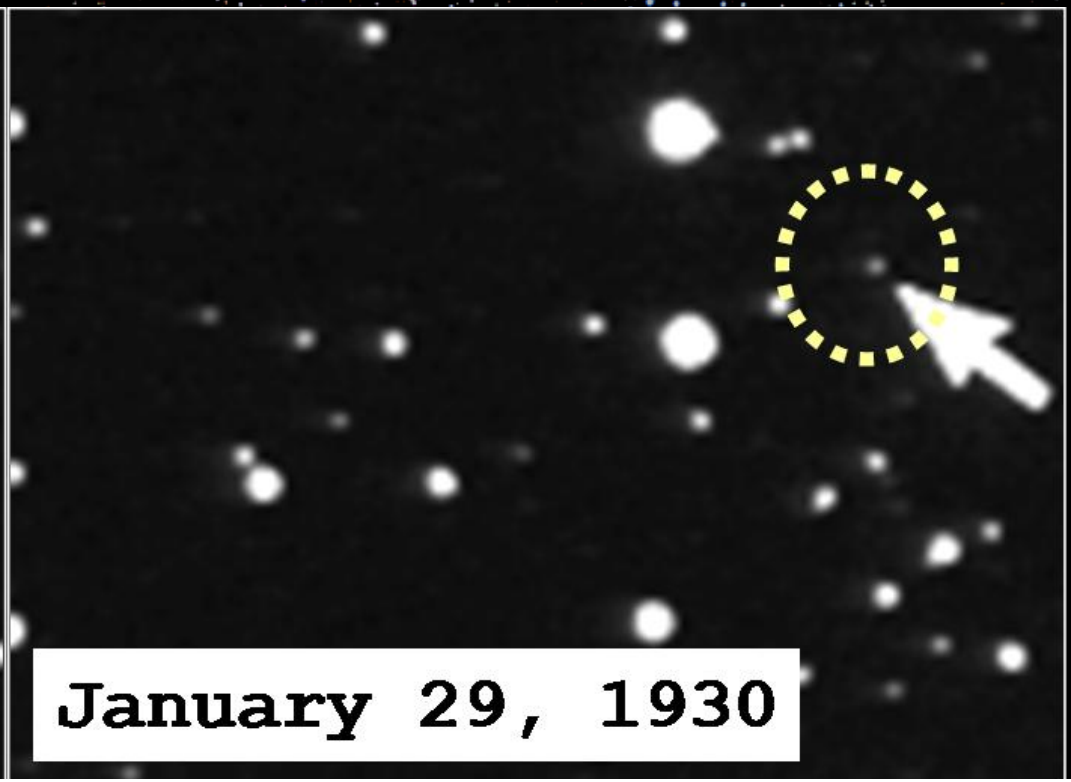
Note: Arthur Eddington was knighted in 1930. That is when he became Sir Arthur Eddington.

Astronomy News
Feb 18, 1930

Clyde Tombaugh discovers Pluto







Astronomy Humor





Observatory Report

Director: Joel Goodman

Progress:

- We have a new class of 11 trainees to become CTA/CTO's
  - They need to have an orientation class with Joel
- Maintenance work will be completed in late Winter early Spring
- First 2019 Public Star Party is March 16th
- Over 300 Books in the HAL Library
  - Bob Dutilly – Librarian

ALCon

Chairperson: Steve Jaworiwsky

Observing Programs and Awards (alphabetical)

Active Galactic Nuclei Observing Program	Advanced Binocular Double Star Observing Program
Advanced Observer Award	Analemma Observing Program
Arp Peculiar Galaxies Northern Observing Program	Arp Peculiar Galaxies Southern Observing Program
Asterism Observing Program	Asteroid Observing Program
No pin Astronomy Before the Telescope	Beyond Polaris Observing Program
Binocular Double Star Observing Program	Binocular Master Observer Award
Binocular Messier Observing Program	Binocular Variable Star Observing Program
Bright Nebula Observing Program	Caldwell Observing Program
Carbon Star Observing Program	Comet Observing Program

This Evening's Speaker

Mr. Mark Perry

Planetary Scientist – Johns Hopkins Applied Physics Lab

Ring rain and tar polluting Saturn:

A new understanding of the interactions between Saturn and its rings


Winter Star Party
2019
35th
Anniversary
Camp Wesuwkee






Marmot

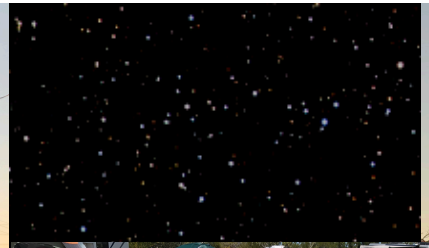

LECTURES
RESTROOMS
SHOWERS

Objects Observed

- Omega Centauri
- Horsehead Nebula
- Orion Nebula (Bino-view)
- 5 Galaxies (NGC1400,1407,1393,1383,1394)
  - –One view 16” Dob
- M46 with NGC 2438 (planetary nebular)
- Rosette Nebula
- M35 with NGC2158 and IC2157 (one view)
- Open Clusters NGC 1807 and 1817
- Interacting galaxies NGC 4038 and 4039
- Whirlpool Galaxy
- M78 Friendly Ghost Nebula
- NGC1435 Temple Nebula
- NGC2264 Christmas Tree Nebula

- Omega Centauri
- M35 Shoe Buckle Cluster
- NGC2158 Open Cluster
- M1 Crab Nebula
- NGC1981 Cool Car Cluster
- M53 Globular Cluster
- M5 Globular Cluster
- Moon
- Jupiter
- Southern Cross
- Comet Iwamoto C/2018Y1
- M83 Southern Pinwheel Galaxy
- NGC5128 Centaurus A
- Many More…….






FOR SALE




















0017
Wegmans
SHREDDED WHEAT
STEPHEN HAWKING
BRIEF ANSWERS TO THE BIG QUESTIONS









Member
Astrophotos and Sketches

Lunar Eclipse



Richard Orr


Chris Miskiewicz
AstroPhotography



Total Lunar Eclipse 2019
January 20 - 21, 10PM - 2AM
Orion 130ST, 17mm
Samsung S8 Default Camera
Duane Dehnert



M1
February 9, 2019
Alpha Ridge Park, Howard Co, MD

8-in F/8 Ritchey-Chretien
LRGB (18,6,6,6) x 4min
144 min total exp time

ZWO ASI1600MM-C
Max Dynamic Range
Wayne Baggett


Joe Novotka


Joe Novotka

Lunar Eclipse

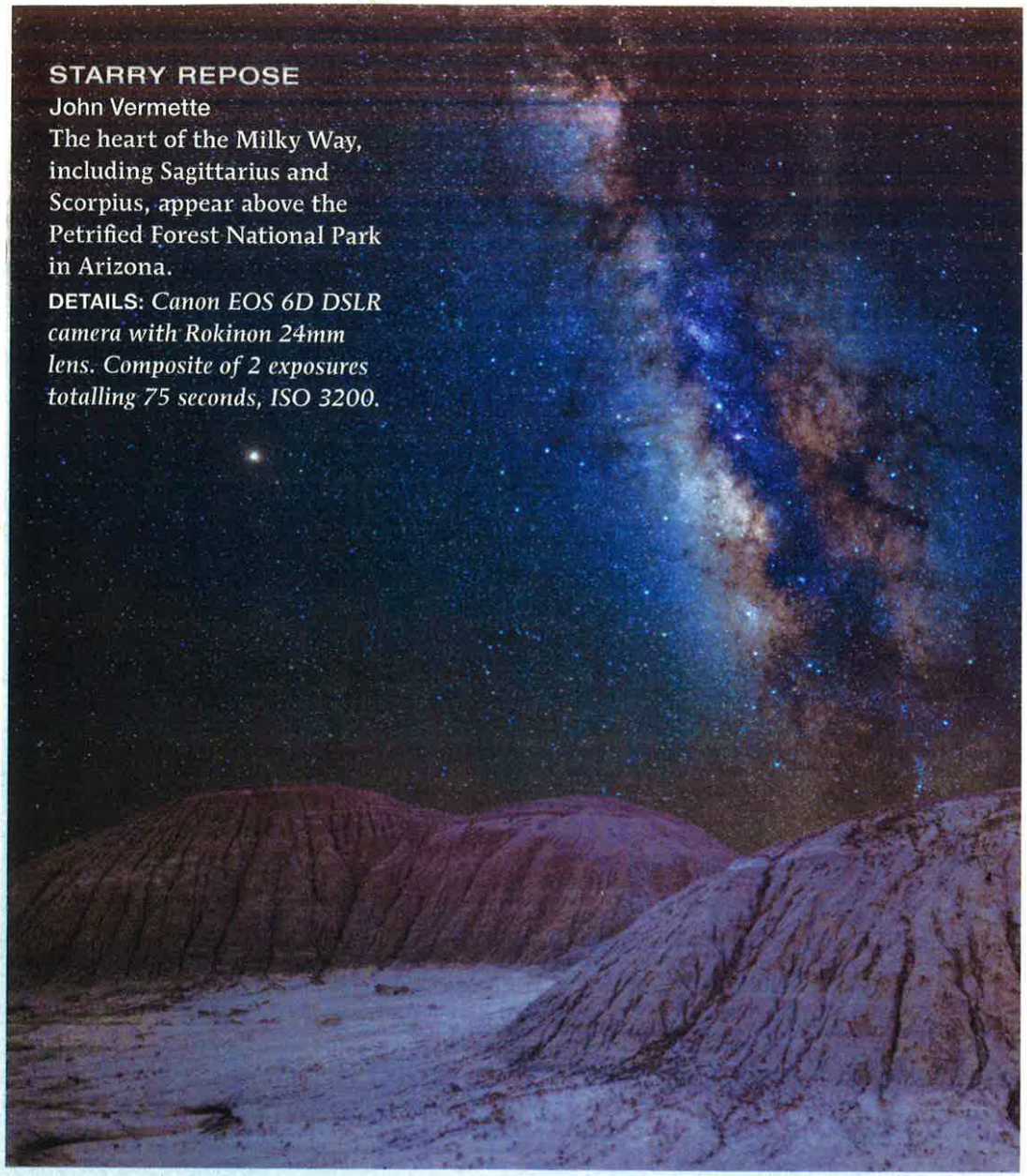


Bob Prokop

Ice Plumes over Enceladus



Forest Arnold



STARRY REPOSE
John Vermette
The heart of the Milky Way, including Sagittarius and Scorpius, appear above the Petrified Forest National Park in Arizona.
DETAILS: *Canon EOS 6D DSLR camera with Rokinon 24mm lens. Composite of 2 exposures totalling 75 seconds, ISO 3200.*

Submitted by Herman Heyn

HAL Public Star Party

March 16, 2019
Alpha Ridge Park

Thank You!

Next month's meeting is on Thursday, March 21st, 2019 at 7 PM
AstroSchool at 6:15

Our Guest Speaker
Dr. Albert Holm
Out of this World Astronomy:
The Orbiting Astronomical Observatory-A2