

**APPLICATION FOR
MEMBERSHIP IN THE
COCONINO ASTRONOMICAL SOCIETY**

Name(s) _____

Address _____

City _____ State _____

Zip _____ Phone No. _____

E-mail _____

I hereby submit my application for:

- _____ Regular Membership(s) @ \$20/year
- _____ Household membership(s) @ \$30/year
(Two Adults)
- _____ Junior Membership(s) @ \$10/year
(under 18 or college student)
- _____ Sponsoring Membership(s) @ \$80/year

Enclosed is a check for the total of \$ _____
made out to:

Coconino Astronomical Society

c/o Anne Wittke, Treasurer
1616 N. Owl Road
Flagstaff, AZ 86004

_____ Sky & Telescope Magazine (Club Rate)
Subscription(s) @ \$32.95/year
Indicate NEW [] or RENEWAL []

Please enclose a separate check made out to:
Sky Publishing Corporation

Signature _____

You can also join CAS from our website via PayPal
Just click on the CAS "Join Us" icon – Top right

Coconino
Astronomical
Society - Mission

The CAS's purpose is to increase the appreciation and knowledge of the science of Astronomy of its membership and within the community. It does this through presentations at meetings, and by hosting star parties, astrophotography workshops, and outreach activities that promote astronomical education.

The club encourages mentoring, and fosters relationships within the Society. CAS also maintains strong relationships with Lowell Observatory, and other Flagstaff area scientific and educational organizations. CAS is a not-for-profit 501(c)3 corporation consisting of dedicated amateur and professional astronomers committed to preserving the night sky, and promoting astronomy to the entire community, regardless of age.



**CAS Dark Sky Site
North of Williams**



- Private 2 acre fenced in property
- Pads are available for portable telescopes
- Cabins / Warm Rooms for Observer comfort
- C-14 telescope available for viewing with operator
- Access is free to CAS members and invited guests



Coconino
Astronomical
Society

**Amateur Astronomers and Astronomy
Enthusiasts in Northern Arizona**



M42 – the Orion Nebula, and
NGC 1977 – the Running Man Nebula
By CAS member Kwang Lee

**2019
CAS Brochure and
Meeting Schedule**



CONTACT INFORMATION
www.coconinoastro.org
info@coconinoastro.org

Get there with your Smart Phone



Also look for us on Facebook

2019 Meeting & Program Schedule

CAS Monthly Meetings and Programs are held the Saturday closest to the Full Moon at the Lowell Observatory, Hendricks Center for Planetary Studies Auditorium at Mars Hill (6:45 pm - 8:00 pm., unless otherwise noted) followed by refreshments, and informal discussion. Meetings are free to the public.

January 19 **Wayne Johnson, CAS** “Hunting Supernovae for Amateur Astronomers”

Wayne (aka Mr. Galaxy) Johnson is an avid visual observer of galaxies. He uses his 25-inch telescope from the suburbs of Flagstaff every night it's not cloudy, smoky, windy or snowy. Occasionally a guest star, supernova (?), appears in one of those galaxies indicating a star several times the size of our sun is in its death throes. Wayne has discovered six supernovae using the Orange County Astronomers' 22-inch telescope in Southern California and is the first amateur astronomer to find two in one night.

February 16 **Dr. Michael Amundson, NAU** “Seeing Arizona, Imagining Mars: Deserts, Canals, Climate Change, and the American West”

Michael Amundson is a professor of History at Northern Arizona University. ~~His~~-He teaches courses on the American West and Sports History. He has published six books on topics ranging from uranium mining and atomic culture, to repeat photography in Wyoming, to songs about cowboys played on wind-up Edison phonographs. This presentation is based on his award-winning article from the Journal of Arizona History.

March 23 **Jeremy Perez, The Belt of Venus** “Nightscape Photography”

Mr. Perez has been doing astrophotography as well as astronomical sketching since he moved to Flagstaff from Phoenix many years ago. He has contributed to Astronomy, and Sky & Telescope magazines as well as maintaining a website: <http://www.perezmedia.net/beltofvenus>. Jeremy describes the methods he uses to image and process nightscape photography such as the Milky Way, meteor showers, and other celestial vistas in and around the Flagstaff, Sunset Crater, and other areas in northern Arizona.

April 20 **Lauren Amundson, Lowell Observatory** “Guided Tour of Lowell Observatory's Putnam Center and Archives”

Lowell Archivist, Lauren Amundson will take us on a tour of the equipment used and images taken over the past 130 years. She will also outline possible archival research projects for volunteers.

May 18 **Dr. Gerard van Belle, Lowell Obs., Director NPOI** “The Fundamental Properties of Stars”

Dr. van Belle's research concentrates on stellar masses, linear radii, and temperatures. These parameters tell us about internal stellar structure and evolution, which in turn is essential in understanding the plethora of new planets recently discovered around nearby stars. He has also applied the highest resolution astronomical techniques to detect such planets and map stellar surfaces.

June 1 **At the Brasch Home, Flagstaff** Annual CAS Picnic and Observing Meeting

Open to CAS membership and invited friends – Time: 6:00 pm

July 13 **Mr. Barry Malpas, Past Dir., UACNJ Obs., NJ** “A Woman's Place is in the Dome”

Mr. Malpas has been interested in astronomy since childhood and studied engineering, mathematics and Physics at Rutgers University, NJ and teaches astronomy at CCC. He also collects antique astronomy books and has researched the history of women in astronomy for over 40 years. Historically, women were usually excluded from educational pursuits, let alone doing Astronomical research. However, many still made major contributions and now even lead science programs. Mr. Malpas will review women astronomers from the antiquity, and also display some antique astronomy books authored by women.

August 17 **Dr. Phil Massey, Lowell Observatory** “Massey on Stellar Masses”

Dr. Massey's research interests include the study of massive stars, binary stars, young clusters, and the initial mass function. He primarily uses the nearby galaxies of the Local Group to study how the evolution of the most luminous and massive stars is affected by environmental factors, such as metallicity. Paradoxically, Massey hates travel, but loves observing from remote mountain tops, particularly Las Campanas Observatory, from which he studies stars in the Magellanic Clouds.

September 14 **Dr. Andrew Odell, NAU** “Serendipity in Science”

Scientific ideas sometimes include lucky coincidences and serendipity is occasionally cited as the key factor in making some scientific discoveries. But, the steps leading to new discoveries often tell a different story. It takes more than being in the right place, at the right time, to recognize a serendipitous discovery. It takes scientific perspective and understanding to look beyond an anomaly and see it as a possible breakthrough. Dr. Odell will be reviewing some of the more interesting ideas have been important to science.

October 10 **Tom Polakis, Astronomy Mag.** “Time Lapse Astronomical Photography”

Tom Polakis is a prolific author on various astronomy topics whose interest dates back to his childhood in Michigan. Since the early 1990s he has contributed to Deep Sky, Sky & Telescope and especially Astronomy Magazines. He currently resides in Tempe, Az, but travels and observes around all of Arizona and recently has observed from Namibia, Africa. He has been involved with various aspects of astrophotography for several decades.

November 17 **CAS Member Activity Presentations** Theme: *Great Observatories I have visited*

Each year CAS members are active in the pursuit of their avocation of Astronomy. At this meeting 4-6 members will present 10-15 minute overviews of the activities and achievements they were involved in during the preceding year.

December 7 **Time and Location TBA**

Annual CAS Holiday Party

Open to CAS membership and invited friends

Club Observing Nights: Can be scheduled
With CAS members David & Kris Frisk in Williams.
Location: CAS Dark Sky Site in Williams – See
our website for details - www.coconinoastro.org

CAS Programs & Speakers

Located in Flagstaff, AZ, the CAS draws expert program speakers from many sources, including Lowell Observatory, the U.S. Geological Survey, the Naval Observatory, Northern Arizona University, Coconino Community College, as well as organizations in AZ, NJ, CA, NY and our own knowledgeable membership, and occasionally from other astronomical groups. CAS also helps schools near the Navajo reservation, as well as the Hopi with their astronomical programs.

Williams Public Observing

On the Friday evening closest to First Quarter Moon, April through October, CAS hosts its monthly community outreach program to educate and promote interest in Astronomy to the general public. CAS members set up their telescopes at Glassburn Park in Williams, and invite the public free of charge to observe the Moon and other visible objects in the night sky



CAS Membership

WE WELCOME ANYONE
INTERESTED IN ASTRONOMY

Membership in CAS is open to all interested in learning more about astronomy and telescopic observing. Membership entitles you to attend, and be involved with, the monthly general meetings, as well as special club events, observing sessions, and star parties, at our Dark Sky Observing Site. Annual and monthly events postcards with CAS happenings are mailed to all Members.

Besides “Regular Membership,” CAS has “Household Memberships” for two adults at the same address, “Junior Memberships” for students, and “Sponsoring Memberships” for those wishing to help support the Society.

If you are interested in becoming a member use the brochure application form, or the one on our website. For questions you can email us at: info@coconinoastro.org, or contact Anne Wittke, CAS Treasurer, at (928) 606-2064.