See the night sky through a variety of telescopes and binoculars; bring your own or use Club members’.

Knowledgeable Prescott Astronomy Club members will be available their personal telescopes, a Club telescope, or binoculars for the public to view interesting objects in the night sky. Starry Nights is sponsored by the Prescott Astronomy Club in cooperation with the Prescott Department of Parks and Recreation, the Prescott Valley Department of Parks and Recreation, and the Highlands Center for Natural History.

### Starry Nights in Prescott and Prescott Valley:

- **March 28:** Pronghorn Park, 7:00 to 9:00 PM; see clusters (Beehive, Hyades, Pleiades), Orion Nebula, galaxies, double stars.
- **April 25:** Highlands Center, 8:00 to 10:00 PM; see double stars, clusters (Beehive, M37, M5) galaxies (M51, M81, M82, M104).
- **May 23:** Pronghorn Park, 8:30 to 10:30 PM; see double stars, clusters (Beehive, M5, M13) galaxies (M51, M81, M82, M104).
- **September 19:** Pronghorn Park, 7:30 to 9:30 PM; see Saturn, nebula (Ring, Eagle, Omega, Dumbbell), clusters (Wild Duck, Keystone).
- **October 17:** Highlands Center, 7:00 to 9:00 PM; Mars, Saturn, Jupiter, nebula (Ring, Eagle, Omega, Dumbbell), clusters (Wild Duck, Keystone, M15).
- **November 7:** Pronghorn Park, 6:30 to 8:30 PM; see Mars, double stars (Alberio, Almaak) clusters (Wild Duck, Keystone).

**Pronghorn Park** is at 7931 E. Rusty Spur Trail in the Pronghorn Ranch subdivision, Prescott Valley. GPS coordinates—34°39'8.14"N; 112°19'34.96"W

**Highlands Center for Natural History** is located at 1375 Walker Road, Prescott, about 2 miles south of Route 69. GPS coordinates—34°30'56.87"N; 112°23'27.16"W

**Embry Riddle Aeronautical University** is located at Willow Creek Road and Dan Carrell Drive, Prescott. Meet at the Visitors Center (west on Dan Carrell Drive past the turnabout) and shuttles will be provided to the ERAU Observatory. GPS coordinates—34°37'N; 112°27'W
These presentations on a variety of subjects relevant to astronomy are sponsored by the Prescott Astronomy Club and the Prescott Public Library and are free to the public. Speakers are selected from a variety of regional organizations for their knowledge and outstanding ability to discuss their topic.

February 20, 6 to 8 PM
Understanding the Biggest Stars with the Smallest Satellites and Telescopes
Noel Richardson, PhD, Assistant Professor Physics and Astronomy, Department of Physics, Embry Riddle Aeronautical University
Stars more massive than the Sun are rare in number but important for several processes across the Universe. One property that makes many of these objects so interesting is that massive stars almost always form in binary pairs. Dr. Richardson will review how massive stars are thought to merge with each other, interact in close systems, and how they lose mass into space. The famous eta Car system is extreme in its properties and will be passing through a periastron passage around the time of the talk, allowing astronomers a chance to examine how the system behaves across the electromagnetic spectrum.

March 19, 6 to 8 PM
Just Over a Century Ago
Klaus Brasch, professor emeritus of biology at California State University, San Bernardino and a docent in the public program at Lowell Observatory in Flagstaff.
Let’s look back a century or so ago to see how far our knowledge and understanding of our Solar System, our galaxy and our universe have advanced in that relatively brief time period. Perhaps this will give us a bit of perspective of where we are headed in the coming century. Klaus will discuss these issues and offer his perspective on the near future.

April 16, 6 to 8 PM
Introduction to the new Giovale Open Deck Observatory at Lowell
James Cole, Senior Public Program Educator, Lowell Observatory
The new Giovale Open Deck Observatory is now open for a unique public stargazing experience. Learn how the six advanced telescopes were selected and installed to enable day and night viewing.

May 21, 6 to 8 PM
Which Telescope Should I Buy?
Joel Cohen, Jack Szellka, & Doug Tilley, Prescott Astronomy Club
Three members of the Prescott Astronomy Club will discuss the factors to consider if you are thinking about purchasing a telescope for yourself or someone else.

September 17, 6 to 8 PM
Planetary Magnetic Fields
Jennifer Buz, PhD, post-doctoral associate at Northern Arizona University
Earth’s rotating liquid iron-nickel outer core generates a dynamo magnetic field and associated magnetosphere which shields our planet from solar wind. Without our magnetosphere we would lose our thick atmosphere and be bombarded by cancer-causing radiation. Our magnetic field is important to many species existing on Earth, including humans, who use it for navigation on the surface. The waning and waxing of our magnetic field are speculated to have influenced past mass extinction events.

In this talk Dr. Buz will introduce how planetary magnetic fields are generated, how they die, and the significance of the presence or absence of a magnetic field on a planetary body. Dr. Buzwill detail what we know about the evolution of the magnetic fields on Earth, the Moon, and Mars, including studies from my past and present research.

October 15, 6 to 8 PM
Meteorites…Arizona Style!
Dolores Hill, Sr. Research Specialist; University of Arizona, Lunar & Planetary Laboratory
Meteorite specialist Dolores Hill will discuss the importance of fresh meteorite falls as pieces of asteroids and what can be learned from them. Arizona is home to several of the world’s largest meteorite falls and a leader in meteorite research. The University of Arizona is at the forefront of planetary science and meteorite research with their magnificent meteorite collection.

November 19, 6 to 8 PM
Discussion on Physics and Astronomy
NASA Space Grant Fellow Student, Embry Riddle Aeronautical University
In 1989, NASA instituted the National Space Grant College and Fellowship Project. Universities involved in the Space Grant program participate in space projects enhancing science and engineering education and research. We are pleased to have an Embry Riddle Aeronautical University student share their work as part of the NASA Space Grant Program.