



LAGOON Nebula

See the night sky through a variety of telescopes and binoculars; bring your own or use Club members'. Knowledgeable Prescott Astronomy Club members will have available their personal telescopes, a Club telescope, or binoculars for the public to view interesting objects in the night sky. For most Starry Night events viewing will be preceded by a brief discussion of what you can expect to see on that particular evening. Starry

Nights is sponsored by the Prescott Astronomy Club in cooperation with the Prescott Department of Parks and Recreation and the Prescott Valley Department of Parks and Recreation.

**Starry Nights at Vista Park in Prescott:**

- **April 21, 7:30 to 9:30 PM**  
See Mars, Saturn, Venus, Comet Garradd, Open Clusters, and the Whirlpool Galaxy.
- **September 22, 7:30 to 9:30 PM**  
See the Moon, Planetary Nebula, and Open/Globular Clusters.
- **November 17, 6:30 to 8:30 PM**  
See the Moon, Jupiter, Pleiades, Planetary Nebula, Andromeda Galaxy, and Open Clusters.

Vista Park is at 1684 Sarafina Drive in the Prescott Lakes subdivision. GPS coordinates—34°35'39.92"N; 112°26'33.00"W

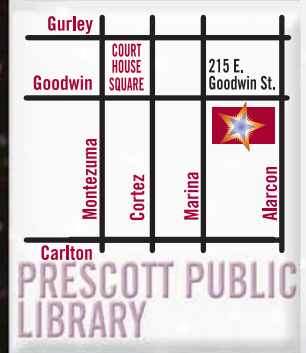
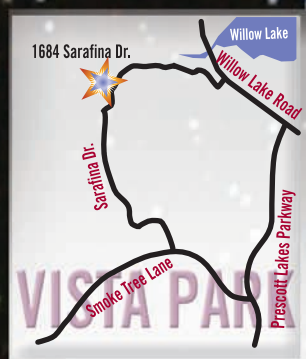
**Starry Nights at Pronghorn Park in Prescott Valley:**

- **March 17, 7 to 9 PM**  
See Mars, Jupiter, Venus, Orion, Comet Garradd, Pleiades, and the Behive Cluster.
- **May 19, 8 to 10 PM**  
See the Mars, Saturn, Comet Garradd, Planetary Nebula, and Open/Globular Clusters.
- **October 20, 7 to 9 PM**  
See the Moon, Planetary Nebula, Open/Globular Clusters, and the Andromeda Galaxy.

Pronghorn Park is at 7391 E. Rusty Spur Trail in the Pronghorn Ranch subdivision. GPS coordinates—34°39'8.14"N; 112°19'34.96"W

See the Transit of Venus across the face of the Sun on **June 5 from 3 PM to Sunset**. It's the last time for over 100 years that this event is observable. Solar telescopes will be available at the Prescott Public Library and in several other locations—check [www.prescottastronomyclub.org](http://www.prescottastronomyclub.org) for info.

**Starry Nights**  
2012



**PRESCOTT PUBLIC LIBRARY**  
[www.prescottlibrary.info](http://www.prescottlibrary.info) ■ 928.777.1500

**PRESCOTT ASTRONOMY CLUB**  
[www.prescottastronomyclub.org](http://www.prescottastronomyclub.org)

WITH THANKS TO OUR SPONSORS:



Photos courtesy of Prescott Astronomy Club President David Viscio.

**Starry Nights**  
2012

PRESCOTT/PRESCOTT VALLEY

**Starry Nights 2012**

**STARTALKS**  
AT PRESCOTT PUBLIC LIBRARY  
**STARGAZING**  
IN PRESCOTT & PRESCOTT VALLEY  
**SPOTLIGHT ON THE STARS IX**  
Astronomy Festival

**GET OUT  
LOOK UP**

# Highlands Center Programs

The Highlands Center for Natural History and the Prescott Astronomy Club sponsor presentations on astronomy-related topics of interest to the public. Each presentation is followed by a "star party" at which Astronomy Club members have their personal telescopes, a Club telescope, or binoculars for the public to view interesting objects in the night sky.

## ■ January 28 @ 6:30 PM: *Features of the Moon*

**Speaker: Fulton Wright.** This presentation will consist of a tour of a variety of features of the Moon coupled with live viewing of these same features through telescopes and binoculars.

## ■ May 26 @ 6:30 PM: *TBD*

Highlands Center 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

# Third Thursday Star Talks at Prescott Public Library Founders Suite

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.

## ■ January 19, 6:30 to 8 PM

***Airborne Astronomy Takes Flight Again with SOFIA***  
Dr. Ted Dunham, Lowell Observatory

Science operations begin in 2012 for SOFIA—the Stratospheric Observatory For Infrared Astronomy. The speaker will touch on the history of airborne astronomy, how airborne astronomy is conducted, what early science results have been obtained, the nature of problems that have been encountered, where things stand in the test and characterization work that is ongoing, and plans for tests in 2012.

## ■ February 16, 6:30 to 8 PM

***Recent Developments in Modern Cosmology***  
Dr. Quentin Bailey, Embry-Riddle Aeronautical University

Our picture of the entire observable universe has changed dramatically in just the last two decades. This is due to increasingly accurate measurements and observations from dedicated ground observatories and satellite missions such as WMAP. We have found that much of the universe is made of strange stuff called dark matter and dark energy, that we do not yet fully understand. This talk will describe the current status of the big bang model of the universe and what lies ahead.

## ■ March 15, 6:30 to 8 PM

***The City Dark***  
Amanda Murray

This documentary is about light pollution and the disappearing night sky. After moving to light-polluted New York City from rural Maine, filmmaker Ian Cheney asks: "Do we need the dark?" Exploring the threat of killer asteroids in Hawaii, tracking hatching turtles along the Florida coast, and rescuing injured birds on Chicago streets, Cheney unravels the myriad implications of a globe glittering with lights—including increased breast cancer rates from exposure to light at night, and a generation of kids without a glimpse of the universe above. Featuring stunning astrophotography and a cast of eclectic scientists, philosophers, historians, and lighting designers, *The City Dark* is the definitive story of light pollution and the disappearing stars.



## ■ April 19, 6:30 to 8 PM

***Exoplanets: Discovery and Characterization***  
Dr. Travis Barman, Lowell Observatory

This talk will provide an overview of exoplanet detection techniques, with an emphasis on recent advancements in directly imaging giant exoplanets and understanding the properties of their atmospheres.

## ■ May 17, 6:30 to 8 PM

***The Search for Life in the Universe***  
Klaus Brasch, Coconino Astronomy Club

Few questions have intrigued us more as humans than "Are we alone in the Universe?" To answer that in a scientifically meaningful way, however, we must first understand how life arose on Earth and whether other planets might also harbor life. Most important of course is the question of whether there are other, technologically advanced life forms in the cosmos. With the discovery that our galaxy is teeming with exoplanets, we are for the first time in history in a position to get real answers to those and related issues.

## ■ September 20, 6:30 to 8 PM

***China, Astronomy, and the IAU***  
Fr. Chris Corbally, SJ, Vice Director, Vatican Observatory.

Having just returned from a two-week meeting of the International Astronomical Union in Beijing, Fr. Chris will discuss his experiences and observations from the meeting.

## ■ October 18, 6:30 to 8 PM

***Einstein and Mysticism***  
Dr. Gary Bowman, Northern Arizona University

What was Albert Einstein's view of mysticism? His general religious opinions are well known, but his statements on mysticism were few—and, arguably, misunderstood. To achieve clarity, the question must be set in historical, philosophical, and theological context. It will be argued that Einstein clearly rejected any supernatural mysticism, but that his views of what can be called "classical mysticism" were more nuanced, more subtle, and more positive than 'mere appearance' suggests.



# Third Thursday Star Talks, *continued*

## ■ November 15, 6:30 to 8 PM

***Volcanism on Various Planets***  
Dr. Moses Milazzo, U.S. Geological Survey

Moses Milazzo is a Research Geophysicist at the USGS Astrogeology Science Center; he has a Ph.D. in Planetary Science from the University of Arizona and is a member of the Mars HiRISE Team. Dr. Milazzo will discuss volcanic activity on various planets.

# Spotlight on the Stars IX at Prescott Public Library, Saturday, September 22

Spotlight on the Stars is a one-day event of the Prescott Astronomy Club and the Prescott Public Library. There will be a variety of scientific demonstrations related to astronomy, information and resources for teachers and students (including home-schooled), and hands-on activities. All ages are invited.

## ACTIVITIES FROM 10 AM TO 2 PM

*Hands-on Science activities and demonstrations related to Science, Technology, Engineering and Mathematics!*

- Solar Telescopes
- Sun Spotter
- Making Comets and Craters
- Astronomy-related crafts and games for kids up to age 5
- Educational Materials for Teachers and Students
- Demonstrations and Activities of Astronomy-related Concepts

## PARTICIPANTS INCLUDE:

*Arizona NASA Education Resource Center/ERAU*

*Members of Prescott Astronomy Club*

*Staff of Prescott Public Library*

*Staff and Students from Northern Arizona University*

*NASA/JPL Solar System Educator & Director,*

*Walker Observatory, Flagstaff United School District*

