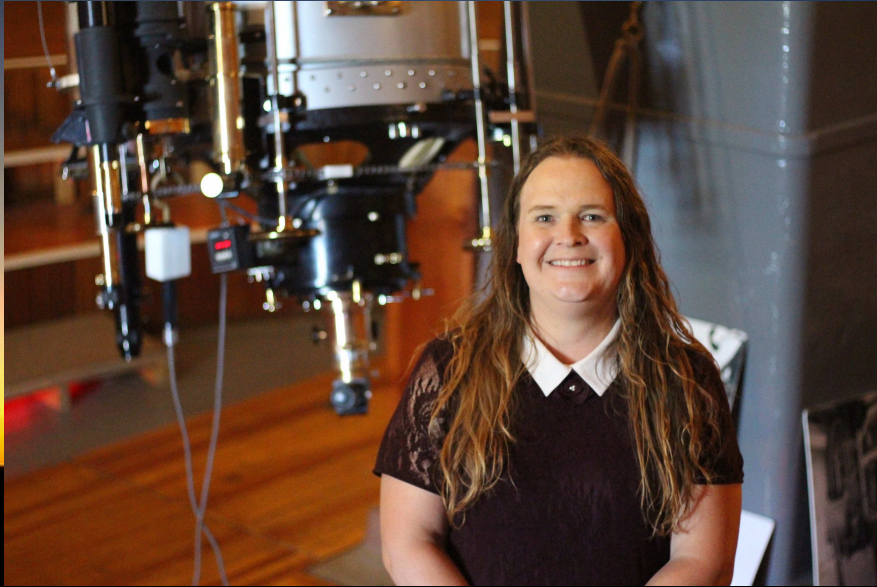


# Winslow Homolovi Observatory

*Guest Speaker: Dr. Danielle Adams*  
*April 22, 2023 6:00 PM (AZ-MST)*



Dr. Danielle Adams is a cultural astronomer who serves as the Chief Marketing and Revenue Officer at Lowell Observatory, where she leads the teams responsible for strategic marketing, science communications, and visitor experience. She studies the development and transformations of indigenous Arabian astronomy through pre-Islamic poetry and Arabic historical literature. She is active in informal astronomy education, speaking to various groups about Arabian cultural astronomy and the heritage of the many Arabic star names that astronomers still use today, and she uses the inspiration of pristine desert skies to advocate for the modern-day preservation of dark skies. Telescope viewing after program.

 Little Colorado River Valley Astronomy Club 

**ARIZONA**  
STATE PARKS & TRAILS



Homolovi State Park I-40 Exit 257 - State Route  
87 North Milepost 347 Winslow, AZ 86047

Email: [homolovi@azstateparks.gov](mailto:homolovi@azstateparks.gov)

[www.azstateparks.com/stars](http://www.azstateparks.com/stars)



(928) 289-4106

# Winslow Homolovi Observatory

Guest Speaker: *Kyler Kuehn, PhD*  
May 20, 2023 6:00 PM (AZ-MST)



Kyler Kuehn, PhD is the Director of Technology at Lowell Observatory in Flagstaff, Arizona. Telescope viewing after program.

 Little Colorado River Valley Astronomy Club 

**ARIZONA**  
STATE PARKS & TRAILS



Homolovi State Park I-40 Exit 257 - State Route  
87 North Milepost 347 Winslow, AZ 86047

Email: [homolovi@azstateparks.gov](mailto:homolovi@azstateparks.gov) (928) 289-4106  
[www.azstateparks.com/stars](http://www.azstateparks.com/stars)

# Winslow Homolovi Observatory

Sponsor: Winslow Public Library

June 17, 2023 6:00 PM (AZ-MST)



National Congress of American Indians presents Screening of Nicole A. Mann, Astronaut. Nicole Mann launched to the International Space Station as commander of NASA's SpaceX Crew-5 mission aboard the SpaceX Crew Dragon spacecraft on October 5, 2022. The California native holds a Bachelor of Science in Mechanical Engineering and a Master of Science in Mechanical Engineering. Mann is a Colonel in the U.S. Marine Corps and served as a test pilot in the F/A-18 Hornet and Super Hornet. She deployed twice aboard aircraft carriers in support of combat operations in Iraq and Afghanistan. She is the first indigenous woman from NASA to go to space. She is registered with the Wailacki of the Round Valley Indian Tribes. Telescope viewing after program.

 Little Colorado River Valley Astronomy Club 

**ARIZONA**  
STATE PARKS & TRAILS



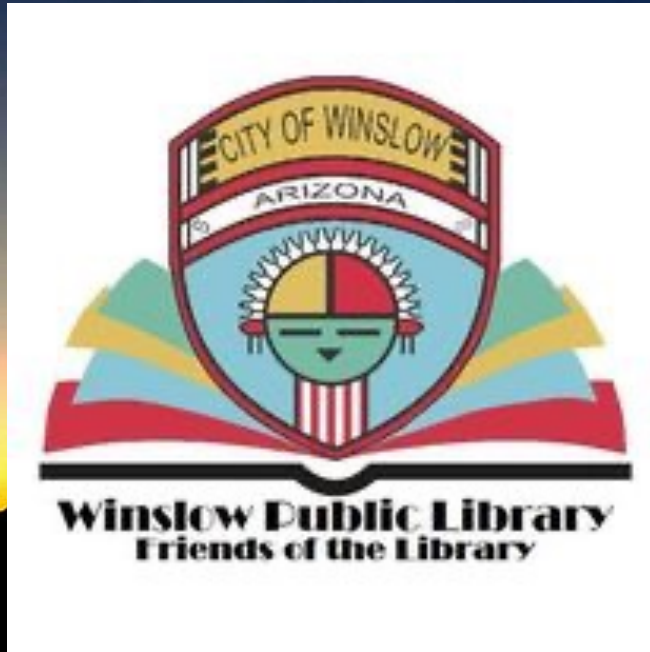
Homolovi State Park I-40 Exit 257 - State Route  
87 North Milepost 347 Winslow, AZ 86047

Email: [homolovi@azstateparks.gov](mailto:homolovi@azstateparks.gov) (928) 289-4106

[www.azstateparks.com/stars](http://www.azstateparks.com/stars)

# Winslow Homolovi Observatory

Sponsor: Winslow Public Library  
July 15, 2023 6:00 PM (AZ-MST)



City of Winslow Public Library. Telescope workshop design and construction of a Galileo Galilei style telescope and historical presentation about the life of Galileo. Telescope viewing after program.

 Little Colorado River Valley Astronomy Club 

**ARIZONA**  
STATE PARKS & TRAILS



Homolovi State Park I-40 Exit 257 - State Route  
87 North Milepost 347 Winslow, AZ 86047



Email: [homolovi@azstateparks.gov](mailto:homolovi@azstateparks.gov) (928) 289-4106  
[www.azstateparks.com/stars](http://www.azstateparks.com/stars)

# Winslow Homolovi Observatory

Guest Speaker: Kevin Schindler  
August 19, 2023 6:00 PM (AZ-MST)



Kevin Schindler is the historian and Public Information Officer at Lowell Observatory in Flagstaff, Arizona, where he has worked for 27 years. He shares Lowell's long history of research and exploration through writing and public presentations. He writes articles for a variety of publications and contributes a bi-weekly astronomy column, "View from Mars Hill", for the *Arizona Daily Sun* newspaper. He has also written seven books, including *Pluto and Lowell Observatory*. Fun fact: Schindler has both a fossil crab and asteroid named after him. Book signing during program.

 Little Colorado River Valley Astronomy Club 

**ARIZONA**  
STATE PARKS & TRAILS



Homolovi State Park I-40 Exit 257 - State Route  
87 North Milepost 347 Winslow, AZ 86047

Email: [homolovi@azstateparks.gov](mailto:homolovi@azstateparks.gov) (928) 289-4106  
[www.azstateparks.com/stars](http://www.azstateparks.com/stars)

# Winslow Homolovi Observatory

Guest Speaker: James Windsor  
September 16, 2023 6:00 PM (AZ-MST)



James Windsor is a Senior PhD candidate in the Astronomy and Planetary Science Department at NAU Exoplanets: The New Frontier! It was not until after the discovery of Mayor and Queloz in 1995 that planets were known to exist outside of our own Solar System. Now there are over 5,000 confirmed planets orbiting other stars! These newly discovered worlds showcase special and unique planetary characteristics-- of which there are no examples in our own Solar System. Join me as we explore these strange new worlds and try to discern answers about:

- What is a planet?
- What's the most common type of planet in our galaxy?
- What can these unique worlds tell us about Earth?
- Are we alone?

Telescope viewing after program.

 Little Colorado River Valley Astronomy Club 

**ARIZONA**  
STATE PARKS & TRAILS



Homolovi State Park I-40 Exit 257 - State Route  
87 North Milepost 347 Winslow, AZ 86047

Email: [homolovi@azstateparks.gov](mailto:homolovi@azstateparks.gov) (928) 289-4106

[www.azstateparks.com/stars](http://www.azstateparks.com/stars)

# Winslow Homolovi Observatory

Sponsor: Winslow Public Library  
October 14, 2023 8:00 AM (AZ-MST)



October 14, 2023 7:45 am – 10:45 am an annular solar eclipse will cross North, Central, and South America. Visible in parts of the United States, Mexico, and many countries in South and Central America, millions of people in the Western Hemisphere can experience this eclipse. During an annular eclipse, it is never safe to look directly at the Sun without specialized eye protection designed for solar viewing. Hydrogen-alpha telescopes will be available for use along with the distribution of special Solar Shades for Sun and Eclipse Viewing. Viewing any part of the bright Sun through a camera lens, binoculars, or a telescope without a special-purpose solar filter secured over the front of the optics will instantly cause severe eye injury. <https://solarsystem.nasa.gov/eclipses/2023/oct-14-annular/safety/>

 Little Colorado River Valley Astronomy Club 

**ARIZONA**  
STATE PARKS & TRAILS



Homolovi State Park I-40 Exit 257 - State Route  
87 North Milepost 347 Winslow, AZ 86047

Email: [homolovi@azstateparks.gov](mailto:homolovi@azstateparks.gov) (928) 289-4106  
[www.azstateparks.com/stars](http://www.azstateparks.com/stars)

# Winslow Homolovi Observatory

*Guest Speaker: Ellie Lincoln*

*October 21, 2023 6:00 PM (AZ-MST)*



Ellie Lincoln is an Astronomy PhD Student, Georgia State University Pre-Doctoral Researcher at Lowell Observatory. The evening topic is about the Method of Speckle Imaging, how it is being improved, and how it is being applied to find multiple star systems, which can help in the search for exoplanets. Telescope viewing after program.

 Little Colorado River Valley Astronomy Club 

**ARIZONA**  
STATE PARKS & TRAILS



Homolovi State Park I-40 Exit 257 - State Route  
87 North Milepost 347 Winslow, AZ 86047

Email: [homolovi@azstateparks.gov](mailto:homolovi@azstateparks.gov) (928) 289-4106

[www.azstateparks.com/stars](http://www.azstateparks.com/stars)



# Winslow Homolovi Observatory

*Guest Speaker: Kenn Evans, II  
November 11, 2023 6:00 PM (AZ-MST)*



Kenn Evans, II is a park ranger at Homolovi State Park and co-founder of the Winslow Homolovi Observatory. Kenn's topic is focused on the men and women of the U.S. Military who have continued their careers at NASA and the newly established U.S. Space Force.

Telescope viewing after program.

 Little Colorado River Valley Astronomy Club 

**ARIZONA**  
STATE PARKS & TRAILS



Homolovi State Park I-40 Exit 257 - State Route  
87 North Milepost 347 Winslow, AZ 86047

Email: [homolovi@azstateparks.gov](mailto:homolovi@azstateparks.gov) (928) 289-4106

[www.azstateparks.com/stars](http://www.azstateparks.com/stars)

# Little Colorado River Valley



## Astronomy Club



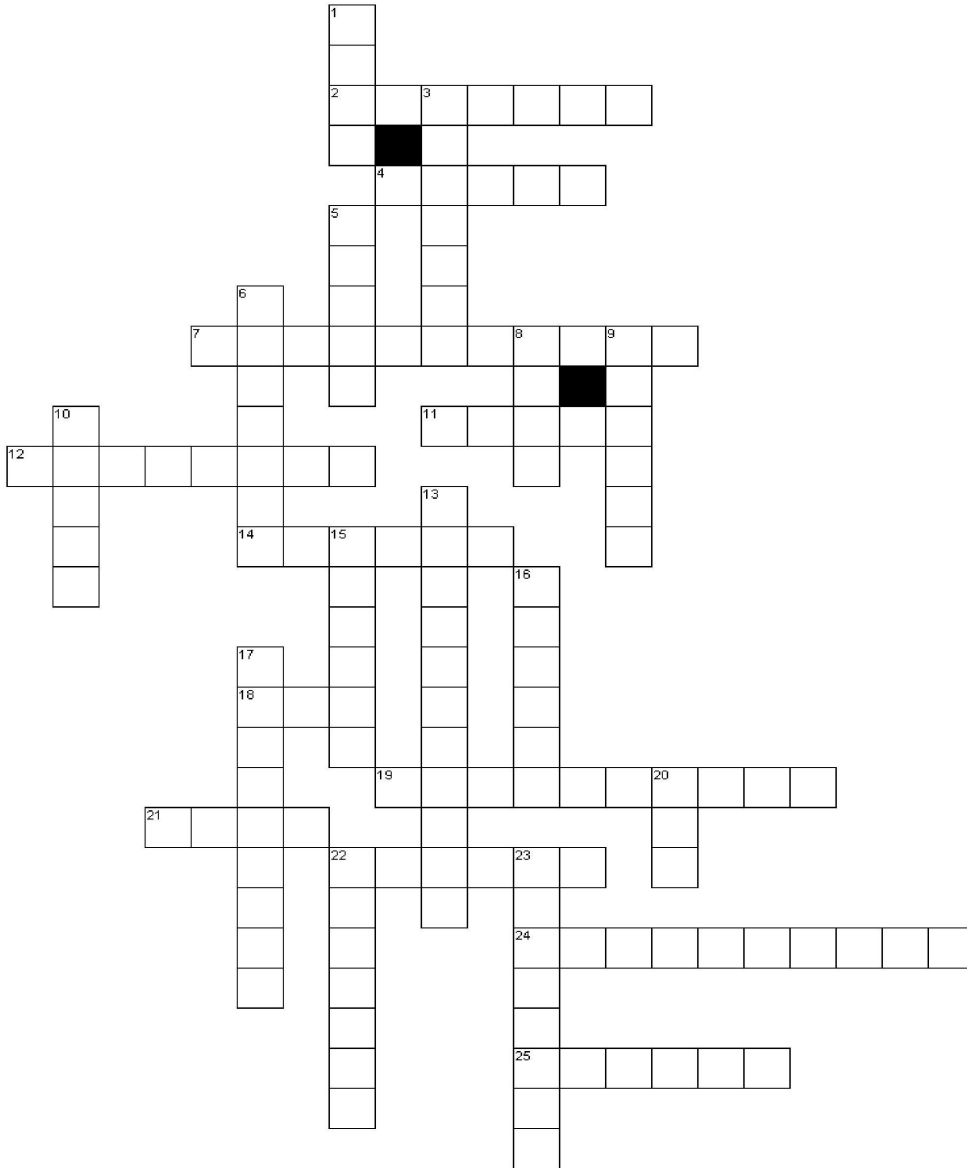
### What is Light Pollution?

Most of us are familiar with air, water, and land pollution, but did you know that light can also be a pollutant? The inappropriate or excessive use of artificial light known as light pollution can have serious environmental consequences for humans, wildlife, and our climate. By joining IDA you can make a difference in protecting our Planet, saving billions of dollars in wasted energy, and connecting future generations with our legacy of starry skies. [www.darksky.org](http://www.darksky.org)



**Star Party Etiquette:** Don't use white lights. Use red lights (put red tape over your flashlight) if you must use a light. ✨ If you come to a star party without a telescope please park away from the observing site to save room for those with heavy equipment to carry. ✨ Please ask permission to touch equipment. ✨ Never touch any glass optical surface. ✨ Don't litter. ✨ Drive very slowly so as to avoid people (especially children) ✨ Watch your step; be especially careful of wires on the ground. Some scopes require power and the use of a battery. ✨ Children — please keep an eye on them and instruct them not to run around or to touch the equipment. ✨ Smoking — no smoking allowed in observation area, please if you smoke, go down wind of telescopes. Homolovi does not offer ashtrays, please do not litter, dispose of extinguished smoking materials properly. ✨ No-aerosol sprays to be used near the telescopes. (Aerosol repellents may drift and leave a film damaging optics). Roll-on repellents recommended. ✨ Green lasers are great tools for pointing out stars, asterisms, and constellations to beginning amateur astronomers. Lasers can ruin long-exposure astrophotos. We ask that green lasers (and any other color of bright laser) be used only for informal sky tours **in the early evening**. Use it sparingly and be prepared to put it away if someone asks. Please stop all laser use after astronomical twilight. ✨ Pets are welcome, but must be supervised and under control. Clean up after your pet. ✨ Homolovi State Park is home to venomous reptiles and insects. Please use caution and be aware of your surroundings. Rattlesnakes are found in and around the observatory.

**Space Exploration Crossword Puzzle**



**Word List**

Astronaut	Frontier	Moon	Shuttle	Technology
Crew	Galaxy	Orbit	Solar System	Working
Earth	Human	Planets	Space	
Energy	Lab	Research	Spacecraft	
Experiments	Launch	Robots	Star	
Explore	Living	Saturn	Sun	

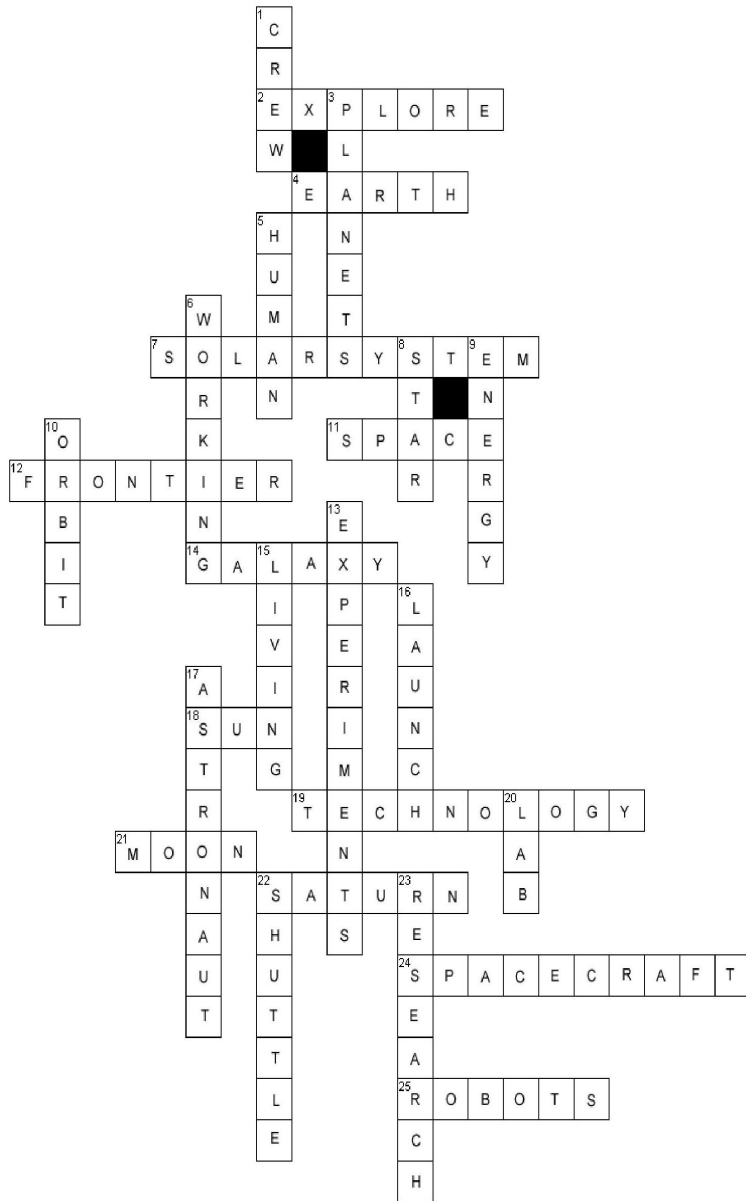
**Across**

2. To \_\_\_\_\_ is to search or travel to discover new things.
4. \_\_\_\_\_ is the planet we live on.
7. The Sun is the center of our \_\_\_\_\_.
11. \_\_\_\_\_ is everything outside of the Earth, where the Sun, stars and other planets are.
12. A \_\_\_\_\_ is an area where people live, but near an area where there are no people.
14. Stars and solar systems grouped together form a \_\_\_\_\_.
18. The \_\_\_\_\_ gives us light and keeps us warm.
19. \_\_\_\_\_ is science as it is put to use in the work of everyday life.
21. The \_\_\_\_\_ gives us light at night.
22. The planet \_\_\_\_\_ has many rings around it.
24. The Space Shuttle is a type of \_\_\_\_\_—A vehicle that travels in space.
25. \_\_\_\_\_ are designed to do things that are too dangerous for Astronauts to do.

**Down**

1. It takes more than one astronaut to fly the Shuttle. Each mission has its own \_\_\_\_\_.
3. Earth and Mars are both \_\_\_\_\_.
5. \_\_\_\_\_ means belonging to the group that includes all people.
6. NASA wants to have more astronauts living and \_\_\_\_\_ in space.
8. The Sun is a \_\_\_\_\_. It looks so big because it is much closer to us than other stars.
9. \_\_\_\_\_ is the power of certain forces of nature to do work.
10. The Space Shuttle and the International Space Station (ISS) both \_\_\_\_\_ the Earth.
13. Scientists send \_\_\_\_\_ on the ISS to test how space affects things.
15. Astronauts on the ISS like \_\_\_\_\_ in space.
16. The Space Shuttle lifts off from the \_\_\_\_\_ pad.
17. An \_\_\_\_\_ is someone who goes into space.
20. A \_\_\_\_\_ is a place where scientists can work and do experiments.
22. The Space \_\_\_\_\_ takes astronauts into space.
23. To \_\_\_\_\_ is to study and observe something to learn more about it.

## K-4 Space Exploration Crossword Puzzle Answer Sheet



### Across

2. To explore is to search or travel to discover new things.
4. Earth is the planet we live on.
7. The Sun is the center of our Solar System.
11. Space is everything outside of the Earth, where the Sun, stars and other planets are.
12. A frontier is an area where people live, but near an area where there are no people.
14. Stars and solar systems grouped together form a galaxy.
18. The Sun gives us light and keeps us warm.
19. Technology is science as it is put to use in the work of everyday life.
21. The Moon gives us light at night.
22. The planet Saturn has many rings around it.
24. The Space Shuttle is a type of spacecraft—A vehicle that travels in space.
25. Robots are designed to do things that are too dangerous for astronauts to do.

### Down

1. It takes more than one astronaut to fly the Shuttle. Each mission has its own crew.
3. Earth and Mars are both planets.
5. Human means belonging to the group that includes all people.
6. NASA wants to have more astronauts living and working in space.
8. The Sun is a star. It looks so big because it is much closer to us than other stars.
9. Energy is the power of certain forces of nature to do work.
10. The Space Shuttle and the International Space Station (ISS) both orbit the Earth.
13. Scientists send experiments on the ISS to test how space affects things.
15. Astronauts on the ISS like living in space.
16. The Space Shuttle lifts off from the launch pad.
17. An astronaut is someone who goes into space.
20. A lab is a place where scientists can work and do experiments.
22. The Space Shuttle takes astronauts into space.
23. To research is to study and observe something to learn more about it.