



# Exploring New Horizons

More than **90 FREE** Activities!

**SEPTEMBER  
18-27**

The Best 10 Days  
of the Year!

**PASSPORT**

Free Admission Into Every Activity!



# Exploring New Horizons

SEPTEMBER 18-27

**BONUS  
PRE-FESTIVAL  
3-DAY  
EVENT!**

THURSDAY, FRIDAY & SATURDAY  
SEPTEMBER 17, 18 & 19

## Flagstaff Star Party

3 – 10 p.m., Buffalo Park

You'll be dazzled by the star power in the First International Dark Sky City! Local astronomers will introduce you to Cassiopeia, Ursa Major and other astronomical wonders at this celebration of Flagstaff's famous dark skies. *Talks are offered at 3, 6 and 7 p.m. Telescope viewing begins at dark (around 7 p.m.).*

Brought to you by Flagstaff Dark Skies Coalition, ECoNA and the City of Flagstaff.

### Early Childhood Activities

These programs offer an added boost of brainpower for ages 0–8 as their young minds are developing!



### After School Talks

4 p.m. and 5 p.m., Monday through Friday  
Lowell Observatory Visitor Center  
*Appropriate for All Ages*



### Twilight Talks

6:30 p.m., Monday through Friday  
MNA Branigar/Chase Discovery Center  
*Appropriate for High School Students and Lifelong Learners*



**The Festival is a Flagstaff Unified School District-approved activity.**

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San Francisco Peaks: A. Kleinman

FRIDAY, SEPTEMBER 18

*Shoemaker Keynote Presentation*

## Exploring New Horizons

**Alan Stern, Ph.D.**

7 p.m., Ardrey Auditorium

Canyons, cliffs, massive mountains of ice and vast crater-free regions! Scientists are amazed as they view the first clear images of Pluto and its moon, Charon. The New Horizons spacecraft is bringing the outer solar system including the icy Kuiper Belt into focus. The man heading up this history-making voyage, planetary scientist Alan Stern, will share the latest images and information in the hometown where Pluto was discovered 85 years ago!



### Dancing Across New Horizons

7 p.m., Ardrey Auditorium

*Preceding the Shoemaker Keynote Presentation*

Enjoy this delightful journey as performers from the NAU Community Music and Dance Academy fly you to the moon and dance among the stars!

### Campus Sky Viewing

7:30 – 10 p.m., NAU Campus Observatory

Explore the night sky on a clear evening through the 20-inch Barry Lutz Telescope for Education and Training!



SATURDAY, SEPTEMBER 19

### Back West Celebration of Stone Balancing

9 a.m. – 4 p.m., Lowell Observatory

Stone balancing involves the simple mechanics of gravity, levers and fulcrums. Experience this ancient art of beauty and harmony with Pieter Schaafsma.

### Science in the Park

10 a.m. – 2 p.m., Wheeler Park

Explore, examine and experience the powerful fun of science discovery! From the solar system to the microscopic world, from prehistoric life to robots, it's hands-on learning for all ages! *Meet at the Rio de Flag booth at 10:30 a.m. for a scavenger hunt and hike to Francis Short Pond for an aquatic invertebrate adventure!*

### On the Burning Edge: A Fateful Fire and Men Who Fought It

*Kyle Dickman, Writer*

11 a.m., Museum of Northern Arizona

Hear from this *Outside Magazine* writer and former wildland firefighter about the events that occurred during the tragic 2013 Yarnell Hill fire.

## SATURDAY, SEPTEMBER 19

### **Forests, Fires and Watersheds: Observatory Mesa Field Trip**

3 – 5 p.m., Meet at Thorpe Park Softball Field/Dog Park Parking Lot  
Join the Flagstaff Watershed Protection Project and learn about the threats facing our forests. Find out how we can work together to protect watersheds and the community. Be prepared with hiking shoes, weather-appropriate clothing, water and your love for nature! **For reservations call 928-213-2500.**

### **Flagstaff Star Party**

3 – 10 p.m., Buffalo Park

You'll be dazzled by the star power in the First International Dark Sky City! Local astronomers will introduce you to Cassiopeia, Ursa Major and other astronomical wonders at this celebration of Flagstaff's famous dark skies. It's also International Observe the Moon Night! **Talks are offered at 3, 6 and 7 p.m. Telescope viewing begins at dark (around 7 p.m.).**

### **Fires of Change Art Exhibit Reception**

5 – 8 p.m., Coconino Center for the Arts

Explore the intersections of wildfire, the effects of climate change, and community adaptation in the Southwest through the eyes of artists, presented in partnership with the Southwest Fire Science Consortium and the Landscape Conservation Initiative.

### **The Legacy of New Deal Archaeology, Part 1**

Jeanne Schofer, Coconino National Forest

7 p.m., Riordan Mansion State Historic Park

This presentation is Part 1 in a two-part series that explores the relationship of archaeological research conducted in Northern Arizona with federal New Deal Programs and its enduring legacy to the archaeological profession and the American public. It will emphasize the early New Deal excavations conducted during the 1933-35 period.

## SUNDAY, SEPTEMBER 20

### **Lava River Cave**

9 a.m., Coconino National Forest

From lava sickles to splashdowns, travel back in time through the ¾-mile Lava River Cave. Be prepared for this strenuous adventure with sturdy shoes, a jacket and a flashlight. **For reservations call 928-606-6653.**

### **Hart Prairie Preserve Nature Walk**

10 a.m., Meet at Fort Valley Plaza Shopping Center, SW Corner

Learn about birds, wildflowers and forest ecology in a 90-minute walk through this lovely alpine meadow. Bring sturdy shoes, sun protection, rain gear or jacket and water. No pets, please!

### **Elden Pueblo Public Day: Explore the Past**

10 a.m. – 4 p.m., Coconino National Forest

Explore prehistoric life in Flagstaff at Elden Pueblo. Participate in excavations, artifact analysis, primitive technologies and hunting games. Bring water, a hat and your sense of discovery! **Tours start at 10 a.m., Noon and 2 p.m.**

## SUNDAY, SEPTEMBER 20

### **Pioneer Museum Open House**

1 – 4 p.m., Hwy 180

See the Arizona Historical Society's Pioneer Museum built in 1908 to be the Coconino County Hospital for the Indigent and the County Poor Farm. Trace Flagstaff through the decades. Check out pioneering medical technology and learn about the Arizona Medal of Honor.

### **Fires of Change: Science, Art Perspectives on Fire, Culture, Climate Change**

Jennifer Gunlock and Bonnie Peterson, Artists

Larissa Yocom, NAU

Chris Marks, Grand Canyon National Park

4 p.m., Coconino Center for the Arts

Learn about the combined artistic and scientific forces at work to create the *Fires of Change* exhibit.

### **Lowell Observatory 'Year of Pluto' Open House**

5 – 10 p.m., Mars Hill

Join Lowell Observatory educators for a Year of Pluto celebration! View indoor astronomy presentations and programs filled with spectacular Pluto-themed science demonstrations. Enjoy stargazing through a number of telescopes and see the latest from the New Horizons mission!

### **300 Years of Exploration: What We Have Learned About Our Closest Neighbor, Mars**

Christopher S. Edwards, Ph.D., USGS

7 p.m., Riordan Mansion State Historic Park

Experience the colorful history of Mars exploration from telescopes to spacecraft with a glimpse toward the future!

### **Campus Sky Viewing**

7:30 – 10 p.m., NAU Campus Observatory

Explore the night sky on a clear evening through the 20-inch Barry Lutz Telescope for Education and Training!



## MONDAY, SEPTEMBER 21

### **Astronomy for Tykes**

10 – 11:30 a.m., Flagstaff Family Food Center, 1903 N. 2nd St.



Children ages 3-5 are invited to explore topics in astronomy through hands-on science investigations. *Parent attendance and participation is required.*

MONDAY, SEPTEMBER 21

### Exploring Other Worlds to Better Understand Our Own

*Oleg Abramov, Ph.D., USGS*

4 p.m., Lowell Observatory

The exploration of planets, moons, comets and asteroids has led to many discoveries about our planet! Find out how lunar rocks help us understand what early Earth was like and what we are learning from the atmosphere on Venus.



### Exploring Volcanism in the Solar System

*Greg Vaughan, Ph.D., USGS*

5 p.m., Lowell Observatory

Jupiter's moon, Io, is super-charged with an intense display of volcanism. However, there are still mysteries we have yet to unravel. Find out how astrogeologists are exploring these distant volcanoes!



### BASIS Flagstaff Open House

5 – 7 p.m., 1700 N. Gemini

Participate in lab activities, check out the science curriculum and meet the teachers!

### Worm Composting Workshop

6 p.m., East Flagstaff Public Library

Learn about the benefits of composting and how to house, feed, harvest and care for worms. It's fun, easy, odorless and produces a great soil fertilizer!

### DNA Profiling of Germs: Insights to Disease

*Dawn Birdsell, Ph.D.,*

*Center for Microbial Genetics and Genomics (MGGen)*

6:30 p.m., Museum of Northern Arizona

Find out how germs circulate among humans, animals and the environment. Learn how engineering advances keep us relatively free of disease.



### Tracking Near Earth Asteroids

*David Trilling, Ph.D., NAU*

6:30 p.m., NAU Cline Library Auditorium

Near Earth Asteroids are asteroids whose orbits bring them close to Earth's orbit. How many are there? What are they made of? What would happen if they hit our planet?

### Indiana Jones and Adventures in Archaeology

*Ted Neff, Ph.D., Glen Canyon National Recreation Area*

6:30 p.m., Sinagua Middle School Mini-Auditorium

Watch the movie, *Raiders of the Lost Ark*, and talk with an archaeologist about real life adventures in tracking down stories of ancient people!



TUESDAY, SEPTEMBER 22

### Toddler Tales

11 a.m., Flagstaff City–Coconino County Public Library (main library)

Your toddler will delight in this special time for stories, songs, games and more—all with a science theme.



TUESDAY, SEPTEMBER 22

### Fires of Change Exhibition

11 a.m. – 5 p.m., Coconino Center for the Arts

Explore the intersections of wildfire, the effects of climate change, and community adaptation in the Southwest through the eyes of artists, presented in partnership with the Southwest Fire Science Consortium and the Landscape Conservation Initiative.

### Fires and Floods Brown Bag Lunch Talk

Noon – 1 p.m., Flagstaff Aquaplex Community Room

After two decades of working toward community wildfire resilience, find out how the Flagstaff Watershed Protection Project is designed to reduce the risk of unnaturally devastating wildfires and flooding. Bring your lunch!

### National Park Architecture Walking Tour

1 p.m., I-40 east of Flagstaff, Exit 204

Celebrate Walnut Canyon National Monument's centennial with a 90-minute walking tour on a paved trail along the canyon's rim. Hear about the monument, the Civilian Conservation Corps (CCC) and Mission 66 through architecture. Meet archaeologists in the Visitor Center. No reservations required.

### You're a Scientist!

*Richard Gaughan, Science Writer*

2 – 3 p.m., East Flagstaff Public Library

Science is a way to figure out how things work all by yourself. Learn how to make scientific discoveries and become a scientist!



### Exploring the Dawn of the Asteroid Vesta

*Timothy Titus, Ph.D., USGS*

4 p.m., Lowell Observatory

Astronomers are still discovering new findings from NASA's Dawn spacecraft, which departed the asteroid Vesta three years ago! Find out the latest information from this main asteroid proto-planet.



### Dawn at Ceres: Illuminating New Horizons

*Michael Bland, Ph.D., USGS*

5 p.m., Lowell Observatory

After more than seven years, the Dawn spacecraft has arrived at Ceres! The dwarf planet is unique in the asteroid belt because of its size and because it may contain substantial amounts of water ice!



### Sea Floor Changes and the Antarctic Circumpolar Current

*Larry Lawver, Ph.D., University of Texas, Austin*

*Jillian Worssam, FUSD*

6:30 p.m., Museum of Northern Arizona

Gain insight into sea floor changes and the Antarctic Circumpolar Current. Scientists will share field notes from their research voyage in the Southern Ocean. Learn about conditions that created Antarctic ice sheets.



### Science Fair SOS

*Sean Ryan, FUSD*

6:30 p.m., Sinagua Middle School Mini-Auditorium

Learn how to make your science project a fun adventure! Parents and students of all ages are welcome.



TUESDAY, SEPTEMBER 22

### Fires of Change

Shawn Skabelund, Curator  
Pete Fulé, Ph.D., NAU

7 p.m., Coconino Center for the Arts

Learn about the combined artistic and scientific forces at work to create the *Fires of Change* exhibit.

WEDNESDAY, SEPTEMBER 23

### Wupatki Pueblo Architectural History Walking Tour

9:30 a.m., Hwy 89, 37 miles north of Flagstaff

Learn about the pueblo's complex history of construction from the 12th century along with historic impacts, reconstruction, scientific exploration and modern-day preservation. The 90-minute walking tour is on a paved loop trail. Meet archaeologists inside the Visitor Center.

### Preschool Express

10:30 a.m., Flagstaff City–Coconino County Public Library (main library)

Surprises galore are in store when we get together for science stories, songs and games!

### Ramps and Pathways for Preschoolers

11 a.m. – 2:30 p.m.

Association for Supportive Child Care, 2708 N. 4th St.

Preschool-age children and their caregivers make their own mazes together in this courtyard of ramps, pathways, obstacles and hoops. Can you get a ball to turn a corner or drop from one path to another?

### Fires of Change Exhibition

11 a.m. – 5 p.m., Coconino Center for the Arts

Explore the intersections of wildfire, the effects of climate change, and community adaptation in the Southwest through the eyes of artists, presented in partnership with the Southwest Fire Science Consortium and the Landscape Conservation Initiative.

### Busy Fingers

3:30 – 5 p.m., Flagstaff City–Coconino County Public Library (main library)

Crafts, music and games based on science stories are great for all ages!

### Captivating Cougars

Kirsten Ironside, USGS

4 p.m., Lowell Observatory

Learn the ways of the cougar, the top predator of the Flagstaff uplands. Find out how wildlife biologists track and study this secretive cat and how this beautiful animal has mastered the ambush attack.

### Here Comes El Niño: What it Means, What to Expect

Brian A. Klimowski, Ph.D., National Weather Service

5 p.m., Lowell Observatory

A strong El Niño is brewing...and that likely means a significant change in our weather this winter. Explore the processes behind El Niño, discuss how it impacts our weather and find out what we should expect as this phenomenon takes its grip on weather around the world.

WEDNESDAY, SEPTEMBER 23

### Safe and Connected: Roadways and Wildlife

Chad Loberger, AZGFD

6:30 p.m., Museum of Northern Arizona

Biologists and transportation officials are working to reduce collisions between vehicles and wildlife. Find out how research is helping to make Northern Arizona roadways safer while maintaining habitat connectivity.

### Fire and Ice: Climate Change and Arctic Ecosystems

Michelle Mack, Ph.D., NAU

6:30 p.m., NAU Cline Library Auditorium

Scientists say climate warming is increasing the frequency of wildfires in boreal forests and Arctic tundra, catalyzing rapid changes in the functioning of natural ecosystems. Find out how Arctic ecosystems are responding to this critical aspect of climate change in the far north.

### Light: What It Is, What It Does

Richard Gaughan, Science Writer

6:30 p.m., Sinagua Middle School Mini-Auditorium

About a quarter of the human brain is devoted to visual processing, which means light is very important. However light can also eliminate tumors, help grow more food, and improve our moods, health and productivity!

THURSDAY, SEPTEMBER 24

### Prehistoric Plant Use Hike

9:30 a.m., I-40 east of Flagstaff, Exit 204

Find out how prehistoric people used local plants. This 2-hour strenuous walking tour goes through a range of elevations and vegetation zones along the 1-mile Island Trail at Walnut Canyon National Monument. Come prepared with good walking shoes, water and appropriate clothing for the weather. No reservations required. Meet inside the Visitor Center.

### Toddler Tales

10:15 a.m., Flagstaff City–Coconino County Public Library (main library)

Toddlers will delight in this special time for stories, songs, games and more—all with a science theme!

### Preschool Express

11 a.m., Flagstaff City–Coconino County Public Library (main library)

Surprises galore are in store when we get together for science stories, songs and games!

### Fires of Change Exhibition

11 a.m. – 5 p.m., Coconino Center for the Arts

Explore the intersections of wildfire, the effects of climate change, and community adaptation in the Southwest through the eyes of artists, presented in partnership with the Southwest Fire Science Consortium and the Landscape Conservation Initiative.

### Science of Sound

2 – 3 p.m., Flagstaff Family Food Center, 1903 N. 2nd St.

Explore the science of sound with representatives from STEM City Center and Orchestra Northern Arizona. Play some musical instruments and make some happy sounds!

THURSDAY, SEPTEMBER 24

### Super Science Heroes

4 p.m., Bookmans Kids Corner

From recycling to water conservation to conserving energy every day, anyone can be a super hero when there's science involved! Learn how with folks from The Arboretum at Flagstaff.

### Mars Rovers: Exploring Over the Horizon

Ken Herkenhoff, Ph.D., USGS

4 p.m., Lowell Observatory

Robots have been slowly crawling over the Martian surface, examining rocks and capturing images. Find out what's planned for the future!



### Wind Energy Engineering

Karin Wadsack, NAU

Alyosha Sandigo, W. L. Gore & Associates

5 p.m., Lowell Observatory

How do wind turbines work? What do engineers do to solve a problem? Hear from NAU students who competed in a national wind turbine design contest. See how turbines generate electricity and lift weight!



### Groundwater Panel Discussion

6 – 8 p.m., Thorpe Park Adult Center

Scientists and city planners are constantly seeking ways to conserve and protect water. Hear from Don Bills, USGS; Abe Springer, NAU; Erin Young, City of Flagstaff; and, Art Babbott, Coconino County. The discussion will be moderated by NAU Aquatic Ecologist Joe Shannon.

### Pluto and Triton's Exotic Ices

Will Grundy, Ph.D., Lowell Observatory

6:30 p.m., Museum of Northern Arizona

Pluto, Triton and other worlds in the outer solar system have exotic shifting ices on their surfaces. These deposits create distinctive landforms that change on a seasonal basis. Find out how scientists study this phenomenon in the laboratory and see the latest examples from the New Horizons mission!



### Walking in Beauty: Addressing Health Concerns Facing American Indian Communities

Julie Baldwin, Ph.D., NAU

6:30 p.m., NAU Cline Library Auditorium

Learn about health challenges facing American Indian populations. Find out how community-based participatory research may help improve health.

### Fires of Change: Firefighters, Communities, News Media

Fernanda Santos, The New York Times

7 p.m., Coconino Center for the Arts

Hear from *The New York Times* Phoenix bureau chief and author of a book on the Yarnell Fire.

FRIDAY, SEPTEMBER 25

### Astronomy for Tykes

10 – 11:30 a.m., East Flagstaff Public Library

Children ages 3-5 are invited to explore topics in astronomy through hands-on science investigations. *Parent attendance and participation is required.*



FRIDAY, SEPTEMBER 25

### Fires of Change Exhibition

11 a.m. – 5 p.m., Coconino Center for the Arts

Explore the intersections of wildfire, the effects of climate change, and community adaptation in the Southwest through the eyes of artists, presented in partnership with the Southwest Fire Science Consortium and the Landscape Conservation Initiative.

### Owl Pellets to Fish: What's Inside Life?

3 – 4:30 p.m., East Flagstaff Public Library

Dissect barn owl pellets, fish, a shark and even frogs to see the biology of these amazing creatures! All materials and supplies are provided. **For reservations call 928-606-6653.**

### Recycling Center Tour

3 – 4 p.m., Materials Recovery Facility on Butler Ave. and Babbitt Drive

What happens to paper, cardboard and other items when they leave the recycle bin? Check out the journey of recyclable materials with the folks from the Willow Bend Environmental Education Center. **For reservations call 928-779-1745.**

### North Country HealthCare Open House

3 – 5 p.m., 2920 N. 4th Street

Explore the many exciting aspects of modern healthcare like telemedicine and learn about health careers!

### Exploring New Horizons in Rattlesnake Behavior

Erika Nowak, Ph.D., NAU

4 p.m., Lowell Observatory

Scientists continue to learn more about the fascinating social life of rattlesnakes! Find out how new information is helping land managers protect these much misunderstood, yet fascinating, predators.



### Jaguars and Ocelots: Our Neotropical Cats

Pinau Merlin, UofA Jaguar Survey and Monitoring Project

5 p.m., Lowell Observatory

Exquisitely beautiful and surrounded by an aura of mystery, these big cats evoke a sense of awe in us. Some call them "the visible soul of the wild." Discover how these elusive animals thrive in Sonora, Mexico, and survive at the very edge of their range in Arizona's backcountry.



### CCC's Science Celebration

6 – 8 p.m., Coconino Community College Lone Tree Campus

View microscopic life, follow clues in forensic research, be amazed by chemistry magic and enjoy the student-produced film, *Our Water*.

### Flagstaff: A Rockin' Town!

David Brumbaugh, Ph.D., NAU

6:30 p.m., Museum of Northern Arizona

Learn about the December 2014 earthquakes that had our little town shaking. Hear about past tremors and nearby faults that could surprise us again!



### SCI Talks

6:30 – 8:30 p.m., Coconino Center for the Arts

Four 15-minute SCI Talks (Science. Communication. Innovation.) will feature Antarctic ice sheets, catastrophic geology in the solar system, dangerous pathogens, and prehistoric art. Audience members will no doubt leave with a new view of the world.

FRIDAY, SEPTEMBER 25

### Campus Sky Viewing

7:30 – 10 p.m., NAU Campus Observatory

Explore the night sky on a clear evening through the 20-inch Barry Lutz Telescope for Education and Training!

SATURDAY, SEPTEMBER 26

### Sunset Crater Volcano National Monument Open House

8 a.m. – 5 p.m., Hwy 89, 12 miles north of Flagstaff

Tour the youngest lava flow in Northern Arizona. Take in volcano demonstrations and explore hands-on activities in the museum. Junior Ranger activities are available all day!

### Red Rock State Park Public Lands Volunteer Day

8 a.m. – 5 p.m., Red Rock State Park, Hwy 89, Lower Red Rock Loop

Volunteers are invited to help maintain and clean up park facilities, trails and Oak Creek riparian areas. Interpreters will be available for questions regarding Oak Creek and its importance to Arizona.

### Walnut Canyon National Monument Open House

8 a.m. – 5 p.m., I-40 east of Flagstaff, Exit 204

Walk through layers of time, tour the museum, join in family friendly activities or attend a ranger-led interpretive program! Junior Ranger activities will be available all day!

### Wupatki National Monument Open House

9 a.m. – 5 p.m., Hwy 89, 37 miles north of Flagstaff

Get to know the incredible cultures that farmed and traded in the extreme desert environment. Ranger programs and Junior Ranger activities are available all day!

### Fort Valley Experimental Forest Station Open House

9 a.m. – Noon, Hwy 180, 1 mile north of Snowbowl Road

Foresters have been using the country's oldest forest research station to study how ponderosa pine trees grow since 1908! Enjoy tours through historic cabins and see how true pioneering research has changed in the last century.

### NAU Engineering Open House

9 a.m. – Noon, NAU College of Engineering, Bldg. 98C, Rms. 101 and 105

What makes "smart materials" smart? Find out how these materials respond to external stimuli, such as a magnetic field, an electric field and temperature changes to perform functions that are commonly completed by complex electro-mechanical systems.

### Helping Hands for America's Lands

9 – 11 a.m., Service Project, Upper Lake Mary Day Use Area

11:30 a.m. – 3 p.m. Presentations, Upper Lake Mary Day Use Area

Bring family and friends to learn about our natural environment and participate in an all-ages service project to celebrate National Public Lands Day. Rangers and biologists will provide animal exhibits, a fishing game, archery and more! Bring water, hats and sturdy shoes. Refreshments will be provided.

SATURDAY, SEPTEMBER 26

### SP Crater Guided Hike

9:30 – 11:30 a.m., Meet at Antelope Hills

Explore the volcanic field at SP Crater and wild lands of Babbitt Ranches on this gentle, 1-mile guided hike. Learn about geology, wildlife, plants and pioneer history. Discover how the Landsward Discovery Council is conserving rare species like the Fickeisen plains cactus and the golden eagle. *For reservations and directions call 928-607-9121.*

### The Arboretum at Flagstaff Fall Open House

10 a.m. – 1 p.m., 4 miles south on Woody Mountain Road

Explore organisms of life! Join in tours, scavenger hunts, science demonstrations and crafts in Flagstaff's most famous high-elevation garden!

### Camp Colton Open House

10 a.m. – 1 p.m., Hart Prairie

Find out what's happening now and what's on the horizon at Camp Colton, FUSD's 44-year-old residential outdoor education center! Tour Camp Colton's off-grid campus, learn about its STEM-based focus and enjoy hands-on science activities.

### Coconino County Sustainable Building Tour

10 a.m. – 2 p.m., Start at Willow Bend Environmental Education Center

Explore new horizons in home and building design that feature innovative materials and technology including: strawbale, advanced framing methods, Insulated Concrete Forms (ICF) and regional materials. Locations will highlight rainwater harvesting, greywater systems, solar photovoltaics (PV), solar hot-water heating and passive solar design. Pick up packets for the self-guided tour at Willow Bend on the day of the tour.

### Moon Walk: Moonscape Adventures in Cinder Fields

10:30 a.m., Coconino National Forest

Flagstaff's volcanic backyard prepared Apollo astronauts for their trip to the moon! See how a simulated moonscape was created during this walk on the site of the old training grounds. Bring sturdy walking shoes, water and appropriate clothing for the weather. *For reservations call 928-526-0502.*

### National Weather Service Open House

11 a.m. – 5 p.m., Camp Navajo Army Depot, Bellemont, I-40, Exit 185

On the look out for hail, thunderstorms, lightning, blizzards and even tornadoes, meteorologists will show you the tools they use to keep us prepared! *Don't miss the weather balloon launch at 1 and 4 p.m.!*

### Fires of Change Exhibition

11 a.m. – 5 p.m., Coconino Center for the Arts

Explore the intersections of wildfire, the effects of climate change, and community adaptation in the Southwest through the eyes of artists, presented in partnership with the Southwest Fire Science Consortium and the Landscape Conservation Initiative.

### Fantastic Voyage

Noon – 4 p.m., Flagstaff Medical Center

This kid-sized health fair offers an amazing journey to see how the body works! Take a look inside and find out how to keep your body operating at its best!

## SATURDAY, SEPTEMBER 26

### **NAU Science and Engineering Day**

1 – 4 p.m., High Country Conference Center

Tour the state-of-the-art Imaging and Histology Core Facility, participate in wind and water energy generation, tour the Center for Science Teaching and Learning in NAU's *brand new* Science and Health Building, learn how to make 3D art, and see the CocoNuts FIRST Robotics team in action!

### **The Legacy of New Deal Archaeology, Part 2**

*Peter Pilles, Coconino National Forest*

7 p.m., Riordan Mansion State Historic Park

This presentation is Part 2 in a two-part series that explores archaeological research in Northern Arizona through New Deal Programs of the 1930s and the enduring legacy to the archaeological profession and the American public.

### **U.S. Naval Observatory Open House and Star Party**

7 – 10 p.m., I-40, 5 miles west of Flagstaff, Exit 191

Experience the Navy's view into the cosmos! Join in tours and peer through telescopes!

### **Campus Sky Viewing**

7:30 – 10 p.m., NAU Campus Observatory

Explore the night sky on a clear evening through the 20-inch Barry Lutz Telescope for Education and Training!

## SUNDAY, SEPTEMBER 27

### **Picture Canyon: Natural and Cultural Preserve Guided Tour**

8 – 10 a.m., Meet at the Parking Area on El Paso Flagstaff Road

See petroglyphs and experience the ecology, geology and archaeology as you walk parts of the Tom Moody and Don Weaver trails through this critical riparian habitat. Wear enclosed hiking shoes, bring water, hat and sunscreen.

You may want a walking stick, camera and binoculars too. **For reservations call 928-213-2154.**

### **Meteor Crater Open House**

8 a.m. – 5p.m., I-40, 43 miles east of Flagstaff, Exit 233

It's the world's best preserved and most accessible impact crater! Crash meteorites into planets with interactive video games or take a guided ½-mile hike along the rim. For a more strenuous adventure, hike the 2½-mile guided rim tour—participations must be at least 8 years old. **For rim tour reservations call 928-289-5898.**

### **Red Rock State Park Public Lands Volunteer Day**

8 a.m. – 5 p.m., Red Rock State Park, Hwy 89, Lower Red Rock Loop

Volunteers are invited to help maintain and clean up park facilities, trails and Oak Creek riparian areas. Interpreters will be available for questions regarding Oak Creek and its importance to Arizona.

### **Interferometer Tour**

9 – 10:30 a.m., Meet at Lowell Observatory on Mars Hill

10:30 – Noon, Meet at Lowell Observatory on Mars Hill

The Navy Precision Optical Interferometer (NPOI) is a telescope capable of extremely high-precision measurements. Learn about this unique telescope and the research being conducted with it on an astronomer-led tour of the NPOI facility. Participants will car pool to Anderson Mesa in Lowell Observatory vehicles. **For reservations call 928-233-3280.**

## SUNDAY, SEPTEMBER 27

### **Homolovi IV Pueblo Guided Tour**

10 a.m., 61 miles east of Flagstaff, Exit 257 to Hwy 87

Homolovi IV is the oldest of the pueblos at Homolovi State Park and usually closed to the public. Participants will caravan in their own vehicles the 12 miles to Homolovi IV (last ¼-mile is dirt road). Prepare for an easy ½-mile walk on uneven ground. **For reservations call 928-289-4106.**

### **Scenic Science Chairlift**

10 a.m., Arizona Snowbowl

Ride the Agassiz chairlift to an elevation of 11,500 feet! At the top, a ranger will meet you to talk about the volcanic history, geography and unusual ecology of the alpine tundra. **Call for one of 50 seats available (maximum of 2 people per reservation), 928-779-1951.**

### **Hart Prairie Preserve Nature Walk**

10 a.m., Meet at Fort Valley Plaza Shopping Center, SW Corner

Learn about birds, wildflowers and forest ecology in a 90-minute walk through this lovely alpine meadow. Bring sturdy shoes, sun protection, rain gear or jacket and water. No pets, please!

### **USGS Flagstaff Science Campus Open House**

Noon – 4 p.m., Gemini Road

Enjoy interactive displays and activities related to geology, geography, biology, hydrology, planetary science and mapping.

### **Adventures in Research: Museum of Northern Arizona Campus**

1 - 4 p.m., Hwy 180

Ants, dragonflies, springs, oh my! Enjoy fun family activities, walking tours, and behind-the-scenes action with museum researchers! Follow the signs to the Research Campus.

### **Fires of Change: Fire Science Boot Camp Talk**

4 p.m., Coconino Center for the Arts

*Saskia Jorda and Steven Yazzie, Artists  
Wesley Hall, Forest Service*

Learn about the combined artistic and scientific forces at work to create the *Fires of Change* exhibit.

### **Moonlight Hike**

6 p.m., Red Rock State Park, Hwy 89A, Lower Red Rock Loop Road

Led by a naturalist, this 2½-hour, 2-mile hike offers a rare opportunity to enjoy the sunset and moonrise from an overlook and return by moonlight! Hear about the archeology, geology, botany and riparian wildlife of the area. Wear sturdy shoes and suitable clothing for cool nights. Bring water and a flashlight. **For reservations call 928-282-6907.**

### **Campus Sky Viewing**

7:30 – 10 p.m., NAU Campus Observatory

Explore the night sky on a clear evening through the 20-inch Barry Lutz Telescope for Education and Training!



The 2015 Flagstaff Festival of Science is made possible through the generous support of our sponsors!

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For program updates and changes, visit us on Facebook and the Festival website.



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