

Flagstaff Festival of Science 2026 -- In-School Speaker Program

List of scientists, engineers, and STEM / STEAM professionals who volunteered to speak in your classrooms. Please review this list, then on the educator registration form (button on webpage or QR code), select up to three choices - considering topic, description, and grade level - then submit. See our website (scifest.org) for more info about this year's Festival.



#	Presenter Name	Organization	General Topic	Presentation Title or Specific Topic	Description / Theme	Grade Level
1	Grace Atkisson	NAU	Geology, Geophysics	Seismology, Plate Tectonics, Natural Disasters	How do we use seismic waves from earthquakes to study how the Earth's surface is changing and moving?	3-12
2	Darby Bergl	NAU	Biology, Ecology	From Spring Green-Up to Fall Colors: Tracking Seasonal Patterns in Plants	Demonstration of PhenoCam: a global network of > 730 automated cameras that track seasonal vegetation changes, helping us understand how ecosystems respond to environmental change and what causes those changes.	1-12, Coll
3	Chrissina Burke	NAU	Anthropology	What is Anthropology?	Introduction to anthropology: a field of social and behavioral sciences that studies humans throughout time and space, including human evolution, artifacts, languages, and social norms.	9-12
4	Shelby Byerly	University of Wyoming	Biology, Ecology	Forest ecology, tree function and health, & remote sensing	From basic forest ecology (how trees function, survive, and die) to using drones, lasers, and statistical models to study forests.	3-12, Coll
5	Becks Carmack	NAU	Planetary Science	Space exploration, habitability, & the icy moons of Jupiter & Saturn	All about the surfaces and atmospheres of icy moons in our solar system.	6-12
6	Lorie Cavalli	Azulita Project	Hydrology, Environmental Science	Flagstaff Watershed Explorers	Discover how rain and snow flow through Flagstaff into the Rio de Flag using an interactive EnviroScape® 3D model. Spray water on the model and watch how litter on schoolyards gets washed straight into our local waterways. Students receive an upcycled reusable water bottle.	K-2

7	Lorie Cavalli	Azulita Project	Hydrology, Environmental Science	Rio de Flag "Sum of the Parts" & Watershed Health	Tracing water from Flagstaff's snowpack down the Rio de Flag, students use a simulation to visualize how upstream choices accumulate into downstream watershed pollution. Investigate how land-based trash breaks down into microplastics and threatens native wildlife. Students receive an upcycled reusable water bottle.	3-5
8	Lorie Cavalli	Azulita Project	Hydrology, Environmental Science	Inland Hydrology & Single- Use Plastic Lifecycle	Explore the link between Colorado Plateau hydrology, water conservation, and fossil-fuel plastic production. Investigate how terrestrial microplastics contaminate high-altitude soil and regional water systems. Students receive an upcycled reusable water bottle.	6-8
9	Lorie Cavalli	Azulita Project	Hydrology, Environmental Science	High-Desert Groundwater & Community Action	Use interactive groundwater models to explore how surface plastic litter breaks down and leaches into underground aquifers. Analyze clips from "The Story of Plastic" film, evaluate solutions like Extended Producer Responsibility (EPR) and municipal policy, connecting local high-desert hydrogeology to global plastic production. Students receive an upcycled reusable water bottle.	9-12
10	Lorie Cavalli	NAU	Biology, Ecology	The Fire Ecology Lab: Hands-On Science of the Southwest	Explore the ecology of the Southwest, focusing on biotic communities, plant and animal adaptations to wildland fire, and regional land management strategies. Hands-on investigation using field specimens, tree-ring fire history data, and wildland fire behavior models.	K-12
11	Hannah Chambless	NPS	Geology, Hydrology	Water, rocks, and fossils in Grand Canyon National Park	Engaging, hands-on presentation about the rock layers in Grand Canyon, including samples of fossils; plus information about Grand Canyon's caves and springs, including examples of equipment we use to study water.	1-12
12	Constantin Ciocanel	NAU	Materials Engineering	Smart Materials and Adaptive Systems	Demonstration of "smart" materials, like shape memory alloys, piezoelectrics, electroactive polymer, and magnetorheological fluids, which we find in common technologies, plus the physics that explains how these materials behave.	9-12
13	Lynette Clark	SciTech Institute	Biology, Geology, Chemistry, Astronomy	Biology, chemistry, anatomy, physiology, Earth & space science	Explore the world of STEM through hands-on activities related to lessons about Earth's processes, how your body works, how chemicals create reactions, and incredible discoveries about our planet and universe.	2-12
14	Jill Cocking	NAU	Biology, Forensics	How DNA is used to solve crimes	All about Forensic DNA analysis.	8-12
15	Jill Cocking	NAU	Biology, Genetics	Hemophilia in the royal families of Europe	All about DNA, genetics, and sex-linked traits, using the history of hemophilia as an example.	8-12

16	Adrianne Coffinger	Kinney Construction	Engineering	Construction / Building	What we experience on a construction jobsite, working with subcontractors, heavy equipment, such as cranes, placing concrete, building walls, etc.	PreK-12
17	Kat Cooney	USGS	Hydrology	Water Science in the High Desert	Introduction to the Colorado River and general USGS water data projects including streamgaging, water quality sampling, and sediment monitoring	9-12, Coll
18	Annabella Dickenson	NAU	Planetary Science	Asteroids and comets in the solar system	How scientists look for ice in the solar system, on small objects like asteroids and comets, by taking pictures with large research telescopes.	3-12
19	Galileo Durgan	Northern Arizona Entomology Club	Biology	Insect anatomy and specimens	We bring living and pinned insects to encourage curiosity about bugs!	PreK-8
20	Jared Duval	NAU	Computer Science	A few games, a broken system, a healthier tomorrow	Human-computer interaction; games for health.	6-12
21	Armin Eilaghi	NAU	Mechanical Engineering	Mechanical Engineering Design of the NAU Rover	Students work in engineering teams to explore how rovers are designed, tested, and operated for different applications (space exploration, environmental monitoring, and object retrieval). Using NAU's student-built rover, they will learn about components, assembly, operation, and the engineering design process through hands-on activities and team challenges.	6-8
22	Ashley Esparza	NAU	Technology, Computer Science	Tech in the Classroom	Hands-on, student-centered uses of technology! There are options to focus on coding, robotics, or AI-literacy focused activities.	K-5
23	Joanie Grant	Momentum Aerial Arts	Physics	The Physics of Aerial Arts	How do they do that?! Discover how physical principles such as friction, conservation of angular momentum, and proprioception work together to allow aerialists and acrobats to create awe inspiring performances. See aerialists perform on trapeze, lyra, and silks, then experience the physical principles discussed.	K-12, Coll
24	Vanessa Ramirez Gutierrez	Arizona Science Center	Science	In-Classroom Workshops	From large-scale assemblies and family nights to smaller-scale classroom workshops, our in-depth, hands-on programs are well-equipped for a variety of settings and consist of grade-specific content that supports Arizona College and Career Readiness Standards and Next Generation Science Standards.	PreK-8
25	Vanessa Ramirez Gutierrez	Arizona Science Center	Engineering	3-2-1 Blast Off! - Stomp Rockets	Design, build, and test your own rockets using a specially engineered stomp rocket launch pad.	PreK-8
26	Nelson Hochberg	Flagstaff Aviation	Aeronautics	Do you want to become a pilot or aircraft mechanic?	Aircraft pilots and mechanics are in short supply, so it is an excellent time to consider a career in aviation. High pay, high respect, and you get to travel the world for free.	9-12, Coll

27	Nelson Hochberg	Flagstaff Aviation	Science	The secret power of science	Civilizations have been around for ~10,000 years but only in the last ~300 years have we made tremendous progress, thanks to science. Learn about the process of doing science and why it's so powerful.	7-12, Coll
28	Angie Hodge-Zickerman	NAU	Math	The Joy of Puzzles: Thinking Like a Mathematician	We'll play with puzzles, spot patterns, and think like mathematicians while exploring how problem solving can be fun, creative, and surprising.	2-8
29	Jani Ingram	NAU	Chemistry, Hydrology	Environmental Analytical Chemistry	Activities focused on water chemistry with chemical measurements of water samples from different sources.	4-8
30	Melanie Johnston	NAU	Biology	Protein biochemistry, enzymology, inhibitor design, metabolic pathways, microbiology, bacterial infections	Mycobacterial infections, like the ones that cause Tuberculosis, are a problem throughout the world; understanding how the bacteria make their vital cell wall can help us treat these infections.	8-12
31	Ivy Knudsen	NAU	Astronomy	Kinesthetic astronomy	All about seasons, orbits, cardinal directions, etc. Students will physically get up and move around, simulating the positions of Earth and other solar system bodies.	3-12, Coll
32	Mary Lara	NAU	Astronomy	Hands-on space related activities (only available Nov - Feb)	Hands-on astronomy and space related activities for K-5 students.	K-5
33	Laura Lee	NAU	Planetary Science, Engineering	Building Instruments for Space Missions	How we design, develop, and test a low-cost camera system for applications on a mission to Mars and beyond!	6-12
34	Laura Lee	NAU	Planetary Science	Crop Growth Experiments in Lunar and Martian Soils	Greenhouse experiments growing various crops in soils similar to the Moon and Mars with fungi for future long-duration human presence on the Moon and Mars.	6-12
35	Mark Loeffler	NAU	Astronomy, Chemistry	Astrochemistry, Lab science	How to study outer space in the laboratory.	1-12
36	Matt Lydy	NAU	Astronomy, Planetary Science	Astronomy, physics, telescopes, constellations	General astronomy topics, and/or all about exoplanets, stellar evolution, and moons of the solar system.	4-12, Coll
37	JJ Melendy	NAU	Astronomy, Planetary Science	Astronomy, planetary science, astrobiology, astrochemistry	General astronomy topics and/or all about the chemical makeup of dwarf planets.	8-12, Coll

38	Jack Moreland	NAU	Astronomy, Planetary Science	Astronomy, solar system, impact craters, science missions, constellations	Students will: create a scaled "pocket solar system" layout; create and learn about impact cratering using sand trays and marbles, and explore upcoming space missions, including ones that will be active for decades, during the students' adult lives.	2-7
39	Helena Murray	The Arboretum at Flagstaff	Biology, Ecology	Habitats, plant & animal adaptations, forest health, watersheds, climate	Discover how water, forests, and habitats support life, and learn the amazing ways plants and animals adapt to their environments in our changing climate.	PreK-12
40	Claire Musser	Grand Canyon Wolf Recovery Project	Biology	Learning from Lobos	Award-winning, inquiry-based education program that helps students of all ages learn from Mexican gray wolves, building empathy, critical thinking, and a deeper understanding of how healthy ecosystems (and communities) can co-thrive together.	PreK-12, Coll
41	Claire Musser	Grand Canyon Wolf Recovery Project	Biology	Learning from wolves: How we can live better together	An engaging presentation where students discover the lives of wolves, challenge common myths, and explore how we can share our world with them in positive ways.	PreK-12, Coll
42	Carla Roybal	USGS	Biology, Ecology	Ecology, restoration, plants	Learn about research on seeds that restore habitats after events like wildfires.	4-12, Coll
43	Brendan Russo	NAU	Civil Engineering	Behind the Scenes: How Engineers Design and Operate our Roadways	Introduction to civil engineering, transportation engineers, traffic signal operations, transportation planning, including in-class activities, such as assessing the impact of human perception and reaction time on stopping sight distance for high-speed roadways.	6-12
44	Michael Shafer	NAU	Planetary Science, Engineering	Engineering for Mars	All about working at NASA's Jet Propulsion Lab on the entry, decent, and landing team for the Mars Science Lab (Curiosity) Rover, including the engineering process, mindset, and how engineers learn to deal with failure and learn.	6-12
45	Megan Taylor	NOAA / NWS	Weather	Exploring Northern AZ's Weather!	Learn about northern Arizona's wild weather and how we forecast it. Hands-on experiments to explore cloud formation; students will see and touch a real weather balloon used to gather weather observations.	2,3,4
46	Morgan Thompson	NAU	Biology	Snakes, other reptiles, and amphibians	Want to pet a snake, and learn from a herpetologist about snakes, other reptiles, and amphibians?	PreK-12
47	Morgan Thompson	NAU	Biology	General wildlife biology	All about wildlife - removing snakes from the presentation to respect cultures that are not comfortable with snake images.	PreK-12
48	Patrice Timmons	NAU	Biology, Health	Wellness - The Puzzle Within Us!	Learn what you can do to help yourself stay healthy and happy!	PreK-6

49	Patrice Timmons	NAU	Biology, Health	Health Starts With You	Learn how to make choices to support your health, well-being, and success!	7-12, Coll
50	Patrice Timmons	NAU	Biology, Health	Food Budgeting	Read and understand nutrition labels, calculate nutrition and costs of different foods!	PreK-12, Coll
51	Patrice Timmons	NAU	Biology, Health	Starting Exercise	Learn about exercise and plan out your own routine - no gym membership needed!	PreK-12, Coll
52	Patrice Timmons	NAU	Life skills, Health	Time Management, Study Skills, Goal Setting	Info and activities to help with time management, study skills, and goal setting.	6-12, Coll
53	Eleanor Turino	Self / Independent	Biology	Trees that rock it!	Presentation by author of informational fiction picture book about petrified forest, for ages 4-8.	1-3
54	Alicia Vaughan	Space Science Institute	Planetary Science, Engineering	Mars, Rovers, Geology	Robotic exploration of Mars! All about operating rovers on Mars, the rover's instrumentation/capabilities, and the geology of Mars.	9-12
55	Greg Vaughan	USGS	Geology, Volcanology	Volcanoes are Awesome!	Volcano types, eruptions, hazards, monitoring, impacts on life	K-12, Coll
56	Greg Vaughan	USGS	Science	The Process of Doing Science	What is science and how does it work?	4-12, Coll
57	Greg Vaughan	USGS	Planetary Science	Water in the Solar System	Where is most of the water in the solar system? How do we know and why is it important?	3-12, Coll
58	Chris Wolfe	NAU	Astronomy	How big is space?	Explore the vast scale of the universe with students by shrinking planets, stars, and galaxies into familiar objects and distances we can actually imagine.	3-5, Coll
59	Chris Wolfe	NAU	Astronomy	Where are all the aliens? (The Fermi Paradox)	If the universe contains many billions of stars and planets, why haven't we found aliens or been visited by them? An open discussion with students.	3-5, Coll
60	Chris Wolfe	NAU	Astronomy	The universe is weirder than you think	A tour of some of the strangest things in the universe (black holes, neutron stars, dark matter, etc.).	3-5, Coll
61	Jut Wynne	NAU	Biology, Ecology	Global Cave Biodiversity	A whirlwind tour of the mysterious subterranean realm of caves around the world, with vignettes from Rapa Nui, southwestern US, Belize, Bhutan, China, and Spain, including deep dives into the latest cave discoveries.	K-12, Coll
62	Jaime Yazzie	NAU	Biology, Ecology, Hydrology	Forests, plants, soil, water, weather, & climate	Learn how watersheds, climate, soils, forests, and native plants are all connected, and how scientists study and care for the land and water. Optional outdoor activities.	3-5