



OCTOBER 15-22, 2011

GREAT FOR ALL AGES!



www.CSCoolScienceFestival.org

Program Guide





EVENT SCHEDULE & MAP

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REGISTER ONLINE

www.CSCoolScienceFestival.org

Saturday, October 15



Cool Science Carnival Day at UCSS

9:00 a.m. - 3:00 p.m.

We open this year's Colorado Springs Cool Science Festival with our signature event. Join us at the UCSS main campus where over 45 organizations will create a day full of fun and discovery with hands-on science activities, cool demonstrations, exciting science shows, open laboratories, science fair research and more. FREE

University of Colorado at Colorado Springs

2 Star Gazing Party

7:00 p.m. - 10:00 p.m.
See the night sky up close and personal with the Colorado Springs Astronomical Society. Check out nebula, globular clusters, the moon, and Jupiter! Please review 'Star Party Etiquette' at CSAS website. FREE Palmer Park (at the dog run in the center of the park), 3650 Maizeland Road

4 Catamount Mountain Campus Hike/Tour

10:00 a.m. - 2:00 p.m.
Founders Julie Francis and Howard Drossman lead a relaxing 2-mile hike/tour. Experience the wonders of nature, tour the research center and learn more about its long-term vision. FREE Catamount Mountain Campus, Woodland Park

5 Garden of the Gods Nature Presentations

10:15 a.m. - Bison! Bison!
11:00 a.m. - Jewels in Flight: Hummingbirds
1:15 p.m. - Mountain Lion
1:45 p.m. - Black Bear
2:30 p.m. - Bobcat
3:15 p.m. - Coyote
Each presentation limited to 22. FREE Garden of the Gods Visitor and Nature Center

Sunday, October 16

3 Garden of the Gods Nature Walk

10:00 a.m. - 10:30 a.m.
GoG naturalists present facts and lore about the Garden of the Gods. FREE Main Parking Lot, Perkins Central Garden Trail Head, Garden of the Gods Park

3 Garden of the Gods Nature Walk

2:00 p.m. - 2:30 p.m.
See description and location under Sunday #3

6 Special Cave Exploration Tour*

2:00 p.m. - 5:00 p.m.
Get a behind-the-scenes look at cave exploration. Meet real cavers, try cave surveying and mapping, learn about cave geology, look for bats and more. *Cave of the Winds admission fee applies. Dress for cave conditions. Under 12 must be accompanied by an adult. Cave of the Winds, Manitou Springs

7 Bristol Brewery Science of Beer Brewing

4:00 p.m. - 5:00 p.m.
Learn the science of beer brewing from the people who really know how to brew it. Microbiology, biochemistry, fermentation, fermentation chain, and the art of brewing will be a part of this adventure. FREE tour, limited to 20. Bristol Brewing Company, 1647 S. Tejon St.

Monday, October 17

3 Garden of the Gods Nature Walk

10:00 a.m. - 10:30 a.m.
See description and location under Sunday #3

5 Garden of the Gods Nature Presentation

11:15 a.m. - People of the Red Earth
1:15 p.m. - Bats of the Garden
Each presentation limited to 22. FREE Garden of the Gods Visitor and Nature Center

3 Garden of the Gods Nature Walk

2:00 p.m. - 2:30 p.m.
See description and location under Sunday #3

8 Teacher Professional Development Seminar

4:00 p.m. - 6:00 p.m.
"Getting Ready for the Changes in AP Biology" Bring your AP Bio book and learn how to identify (or create) a story line for your course. Improve instruction and assessment. FREE (CEU accreditation possible.) BSCS, 5415 Mark Dabling Blvd

9 Science on Tap

6:30 p.m. - 8:00 p.m.
Grab a beer (or soda) and learn about "Algae Biofuels: The Answer to America's Gas Pains?" Dr. Don Veverka discusses current Algae-to-Biofuels research. Discussion/Q&A following 20-minute presentation. FREE (Drinks/food must be purchased.) Jack Quinn's Pub, 21 S. Tejon St.

10 Geeks Who Drink

8:00 p.m. - 10:00 p.m.
During the Science Festival week, 2-3 rounds of the trivia quiz game will feature science-related questions. Geeks Who Drink loves science nerds! FREE (to play the game) Jack Quinn's Pub, 21 S. Tejon St.

Tuesday, October 18

11 Scavenger Hunt at the Zoo*

9:00 a.m. - 5:00 p.m.
Explore the Cheyenne Mountain Zoo and use your investigative skills for a chance to win a zoo prize pack! *Zoo admission fee applies. Scavenger hunt is free. Cheyenne Mountain Zoo

3 Garden of the Gods Nature Walk

10:00 a.m. - 10:30 a.m.
See description and location under Sunday #3

12 GARDEN OF THE GODS NATURE WALK

11:00 a.m. - 4:00 p.m.
Science and art swim into a unique experience under the sea. Take a peek at the ocean and an amazing creature. Enjoy the Buell Children's Museum Exhibit, "Smilin' Islands - A Tropical Caribbean Adventure." *Admission fee Sangre de Cristo Arts Center, 210 North Santa Fe, Pueblo, Colorado.

13 Wildlife of the Garden

11:30 a.m. - 12:15 p.m.
GoG naturalists present a 20-30 minute talk describing the variety of wildlife found in the Garden of the Gods ecosystem.

Each presentation limited to 22. FREE Garden of the Gods Visitor and Nature Center

14 Downtown Sun-Viewing Party

11:30 p.m. - 1:00 p.m.
Join the Colorado Springs Astronomical Society to see what the sun looks like up close. Check out sun spot activity, and more! FREE Pioneer Museum lawn, 215 S. Tejon St.

3 Garden of the Gods Nature Walk

2:00 p.m. - 2:30 p.m.
See description and location under Sunday #3

15 Teacher Professional Development Seminar

4:00 p.m. - 6:00 p.m.
"Identifying and Using Strategies to Help Your Students Make Sense of Concepts in Science" Middle school and home school teachers will learn strategies to help students make sense of, not just memorize, complex science data, ideas, and/or concepts. FREE, limited to 40. (CEU accreditation possible.) BSCS, 5415 Mark Dabling Blvd

16 GARDEN OF THE GODS NATURE WALK

7:00 p.m. - 9:00 p.m.
"The Southwest in the World: A Big-Picture View of the Prehistoric Southwest" Dr. Stephen H. Lekson, curator of archaeology and professor of anthropology at the Museum of Natural History, CU Boulder, speaks on the larger view of the prehistoric Southwest in its context of ancient North America. FREE, limited to 30. Fire Station #19, 2490 Research Parkway

17 Geeks Who Drink

8:00 p.m. - 10:00 p.m.
During the Science Festival week, 2-3 rounds of the trivia quiz game will feature science-related questions. Geeks Who Drink loves science nerds! FREE (to play the game) Thunder and Buttons, 2415 Colorado Ave.

Wednesday, October 19

18 Electric-Powered Model & RC AIRCRAFT

9:00 a.m. - 11:00 a.m.
Acrobatic airplanes, electric gliders and scaled models of real airplanes, all powered by electricity will soar through the sky. After they land, see them close up. FREE Pride Soccer Field, Woodmen Rd. just east of Marksheffel Rd.

3 Garden of the Gods Nature Walk

10:00 a.m. - 10:30 a.m.
See description and location under Sunday #3

12 GARDEN OF THE GODS NATURE WALK

11:00 a.m. - 4:00 p.m.
See description and location under Tuesday #12

5 Garden of the Gods Nature Presentations

12:00 - One of a Kind Dinosaur - Theiophytalia kerri
1:15 - Rattlesnakes
Each presentation limited to 22. FREE Garden of the Gods Visitor and Nature Center

3 Garden of the Gods Nature Walk

2:00 p.m. - 2:30 p.m.
See description and location under Sunday #3

19 County Coroner and Crime SCIENCE LAB

2:00 p.m. - 3:00 p.m.
Get a look behind the scenes of the El Paso County Sheriff's Office Crime Lab. See up close and personal how real-life CSI really works and how this important science-rich, county crime lab works. FREE, limited to 40. County Coroner's Office, 2743 E. Las Vegas St

20 GARDEN OF THE GODS NATURE WALK

6:00 p.m. - 8:00 p.m.
Explore the Martian terrain using different robots. Complete mission objectives by programming and driving a Mars rover through the rocky landscape. Learn about robots and the harsh Martian environment. FREE, limited to 100, older elementary and up, must be accompanied by an adult.

Space Foundation Discovery Institute, 105 Coleridge Ave.

21 Raptor CSI*

6:30 p.m. - 8:00 p.m.
Uncover a raptor puzzle—participants will help determine the cause of death of raptors by following the same steps professional wildlife biologists use. Warning: not for the squeamish! Dissection of dead raptors. *Admission fee, ages 11 and older. Registration required. Limited to 30. Nature and Raptor Center of Pueblo, 5200 Nature Center Rd. Pueblo, CO 81003

22 Science of Nutrition and Wellness Seminar

6:30 p.m. - 8:00 p.m.
Nanna Meyers, Ph.D. will discuss state-of-the-art developments in the world of nutrition and wellness. FREE Colorado Springs Fine Arts Center, Music Room, 30 West Dale Street

23 Geeks Who Drink

8:00 p.m. - 10:00 p.m.
During the Science Festival week, 2-3 rounds of the trivia quiz game will feature science-related questions. Geeks Who Drink loves science nerds! FREE (to play the game) McCabe's Tavern, 520 S. Tejon St.

Thursday, October 20

3 Garden of the Gods Nature Walk

10:00 a.m. - 10:30 p.m.
See description and location under Sunday #3

12 GARDEN OF THE GODS NATURE WALK

11:00 a.m. - 4:00 p.m.
See description and location under Tuesday #12

24 Money Science

11:00 a.m. - 5:00 p.m.
There is a science to money! This is a 15-minute presentation that will be a highlight for Science Festival goers. Examine United States paper bills and learn what measures are taken against counterfeiting and how they work. FREE for Money Science Event. (Full museum visitation is encouraged-admission fee \$5.) The Money Museum, 818 North Cascade Ave

25 Super Senses Science Story Time

10:30 a.m. - 11:30 a.m.
Come read books and experiment with tasting, touching, and smelling at the Science Story Time! FREE, limited to 25. Manitou Springs Public Library, 701 Manitou Ave

5 Garden of the Gods Nature Presentation

11:30 a.m. - 12:15 p.m. - Bighorn Sheep Presentation limited to 22 FREE Garden of the Gods Visitor and Nature Center

3 Garden of the Gods Nature Walk

2:00 p.m. - 2:30 p.m.
See description and location under Sunday #3

26 Teacher Professional Development Seminar

4:00 p.m. - 6:00 p.m.
"Videocase Lesson Analysis for Improved Teacher Practice" Elementary teachers will be introduced to a series of research-based teaching strategies through the use of video analysis of actual classroom science teaching. FREE, limited to 40 (CEU accreditation possible.) BSCS, 5415 Mark Dabling Blvd

27 Geeks Who Drink

8:00 p.m. - 10:00 p.m.
During the Science Festival week, 2-3 rounds of the trivia quiz game will feature science-related questions. Geeks Who Drink loves science nerds! FREE (to play the game) Old Chicago's, 118 N. Tejon St.

Friday, October 21

3 Garden of the Gods Nature Walk

10:00 a.m. - 10:30 p.m.
See description and location under Sunday #3

12 GARDEN OF THE GODS NATURE WALK

11:00 a.m. - 4:00 p.m.
See description and location under Tuesday #12

DOWNTOWN EVENTS

4 Woodland Park

5 Garden of the Gods Nature Presentations
 10:15 a.m. - Bats of the Garden
 11:30 a.m. - Zebulon Pike: The Man of the Mtn.
 Each presentation limited to 22. FREE
 Garden of the Gods Visitor and Nature Center

3 Garden of the Gods Nature Walk
 2:00 p.m. - 2:30 p.m.
 See description and location under Sunday #3

28 Cool Science SCVNGR Hunt!
 Registration at 5:30 p.m.
 Using your smartphone and the SCVNGR™ app, players have 2 hours to accrue points by completing challenges all over downtown. Prizes at 8:30 pm - 1st place: Apple IPAD2; 2nd place: Nook Color; 3rd place: Nook eReader.
 Start/Finish - Jack Quinn's Pub, 21 S. Tejon St.



Saturday, October 22

29 J O A G S J O F A N D O O I D
 9:00 a.m. - 4:00 p.m.
 The Colorado Springs Rocket Society hosts a special Science Festival Sport Launch. See a variety of model rockets just come to watch. Motors and help available to enjoy a fun day of rocketry!
 FREE
 Challenger Middle School, 10215 Lexington Dr.

3 Garden of the Gods Nature Walk
 10:00 a.m. - 10:30 p.m.
 See description and location under Sunday #3

30 Cool Rocks of Colorado Springs Geology Hike*
 10:00 a.m. - 12:00 p.m.
 Discover the amazing geology of the Pikes Peak Region. Walk to the Ute line and witness where the Rockies rose above the plains. Complete a Pikes Peak granite mineral card to take home. *\$3 Starsmore Discovery Center, 2120 South Cheyenne Canon Rd.

31 Geocache Treasure Hunt
 10:00 a.m. - 1:00 p.m.
 Geocaching and science puzzles collide in this outdoor treasure hunt. Your knowledge of basic science and solving of a geocache. No geocaching experience necessary. FREE
 Western Museum of Mining and Industry, 225 North Gate Blvd.

32 Good Soil,
 10:00 a.m. - 1:00 p.m.
 Learn about what good soil does to your food, what healthy food does to your body, and what Venetucci Farm will teach about building a compost, cooking a stone soup, and burning energy for sports performance and health promotion. FREE, limited space.
 Venetucci Farm, 5210 South US Hwy 85

33 5 O O E W M O C A M J H O A N G E I
 10:00 a.m. - 1:00 p.m.
 Student teams will race to see which team can solve a set of 25 Rubik's Cube puzzles in the fastest amount of time. Denver Nuggets star Chris Andersen will be the master of ceremonies! Come watch the fun!
 FREE
 The City Auditorium, 221 E. Kiowa St.

5 Garden of the Gods Nature Presentations
 10:00 a.m. - Geology Walk
 12:15 p.m. - Pikes Peak or Bust - The Gold Rush of 1859
 1:15 p.m. - Our Amazing Rocks
 Each presentation limited to 22. FREE
 Garden of the Gods Visitor and Nature Center

12 A G S U M D M O O D A M O N O L A G B L N
 11:00 a.m. - 4:00 p.m.
 See description and location under Tuesday #12

34 O O H B S O S O M N O O O O .
 10:00 a.m. - 3:00 p.m.
 In addition to regular museum activities, local scientists will have special science demonstrations. Science from CU Boulder will demonstrate magnets and electricity. Wings simulator stations and a Goddard rocket station. *Museum admission applies.
 Western Museum of Mining and Industry, 225 North Gate Blvd.

35 Gizmos from Stuff
 1:00 p.m. - 3:00 p.m.
 Inventor and artist Gary Weston will demonstrate how to repurpose everyday objects into Sci-Fi constructions, sculptures and gizmos. Learn how to see everyday objects around you all the time with new eyes.
 Imagination Space at the Citadel Mall

3 Garden of the Gods Nature Walk
 2:00 p.m. - 2:30 p.m.
 See description and location under Sunday #3

36 Cool Science Improv with "Stick Horses in Pants"*
 8:00 p.m. - 10:00 p.m.
 to close out this year's Cool Science Festival. "Stick Horses in Pants" takes aim at the quirky world of science. *\$5 admission if Science Festival is mentioned.
 The Broadmoor Theater, 1 Lake Avenue

Sunday, October 23

37 KRCC Open House: Cool
 1:00 p.m. - 4:00 p.m.
 Come tour public radio station KRCC on the campus of Colorado College during

its annual membership drive. Join the Colorado Springs Astronomical Society in looking at the sun with its solar scopes and Cool Science in more fun, hands-on activities!
 KRCC Studios 912 North Weber

Additional, Non-Public Events

dpiX VIP Reception
 Colorado Springs Science Center Project's Science Fair Award winners will be recognized and will tour dpiX's clean room fabrication facility. Jay Elliot, former executive at Apple, and author of the book *The Steve Jobs Way: iLeadership for a New Generation*, will speak to the winners and VIP guests. Panel discussion afterwards about the intersection between leadership, technology, and the entrepreneur.

& C E W N I D O O O O C L A M M A M M A I N A U T W O L
 Agilent's local Hardware Test Facility to see how experts there use math and science daily to determine if a new product in development is safe and reliable.

, B O M M O P O O W J C L O H
 A day-long program for 6th-8th grade girls selected by their schools to encourage them in science, technology, engineering and math (STEM). The day will include chemistry and physics demonstrations, interactive experiments, and dynamic hands-on activities designed to engage.

* Admission fees apply

2011 Colorado Springs Cool Science Festival Organizers

ORGANIZERS: COLORADO SPRINGS SCIENCE CENTER PROJECT, COOL SCIENCE, UNIVERSITY OF COLORADO AT COLORADO SPRINGS, BSCS, JOHANNES KEPLER LEVEL, MARIE CURIE LEVEL, NIKOLA TESLA LEVEL, KAISSER PERMANENTE, FIRST BANK, CHEYENNE MOUNTAIN ZOO, DENVER BOTANIC GARDENS, PALMER HIGH SCHOOL, CHEMISTRY CLUB, PENROSE/ST FRANCIS HOSPITALS, PIKE'S PEAK RC CLUB, PIKES PEAK SOARING SOCIETY, SCIENCE MATTERS IN AMERICA, SOUTHERN COLORADO MOUNTAIN GROTTO, SPACE FOUNDATION, THE SOLUTION IS SCIENCE, THE TRAVELING SEA, UNIVERSITY OF COLORADO SCHOOL OF PHARMACY, USAFA STEM CLUB, USAFA PHYSICS IS PHUN, WESTERN MUSEUM OF MINING & INDUSTRY

The Colorado Springs Science Center Project



The CSSCP is focused on bringing a state-of-the-art regional science center to Colorado Springs. In the works for almost four years now, this is a multi-dimensional effort with a variety of community leaders and organizations collaborating to develop a leading-edge

science and technology center to include interactive science exhibits, multi-generational partnership along the Front Range and outreach efforts spreading intellectual excitement throughout the region.

Seeking to inspire the inquisitive minds in all of us, the CSSCP initiated the Colorado Springs Cool Science Festival to offer a temporary glimpse of what a science center could bring to the Pikes Peak region permanently. www.csscp.org

Cool Science



Making science cool for kids, our mission for ten years has been to excite, inspire and engage Pikes Peak area students, teachers and parents in the world around us. Our passionate volunteers—mostly professional scientists, en-

gineers and educators—provide a variety of fun, intimidation-free science demonstrations and hands-on activities in schools and public venues, including two big free events each year at Colorado College and the University of Colorado at Colorado Springs (UCCS).

In fact, the kick-off event of the Colorado Springs Cool Science Festival is our Cool Science Carnival at UCCS. www.coolspace.org

The Center for STEM Education at UCCS



CSTEME at the University of Colorado at Colorado Springs seeks to respond to the lagging performance of students and the looming shortage of skilled workers in science, technology, engineering and math (STEM).

We offer an array of unique programs for middle-and-high-school students and teachers that provide hands-on experiences with the goal of increasing the number of students pursuing STEM careers. The Colorado

Springs Cool Science Festival is another way of scientists and engineers! www.uccs.edu/~pipes/index.html

BSCS



For more than 50 years, BSCS has been developing research- and inquiry-based science education materials and professional development services for teachers and

learners, kindergarten through college. We are excited to support the Colorado Springs Cool Science Festival in bringing science alive for our community and showing every-

one how cool (and relevant) it is! www.bsos.org

Albert Einstein level

The Joseph Henry Edmondson Foundation



Johannes Kepler level



SAVE THE DATE FOR
2012
October
13th-20th

Marie Curie level

Colorado Springs
Utilities
AGI
Wal-Mart

Nikola Tesla level

Kaiser Permanente
First Bank

In-Kind Sponsors



Festival Event Hosts

- Agilent Technologies
- American Numismatic Association
- Bristol Brewing Company
- BSCS
- Buell Children's Museum /Sangre de Cristo Arts Center
- Catamount Institute
- Catamount Mountain Campus
- Cave of the Winds
- Challenger Learning
- Center of Colorado Springs
- Cheyenne Mountain Zoo
- Colorado Archaeology Society, Pikes Peak Chapter
- Colorado Springs Astronomical Society

- Colorado Springs Rocket Society
- Colorado Springs School District 11
- dpiX
- Friends of Cheyenne Canon
- Garden of the Gods Park
- Geeks Who Drink
- Imagination Celebration
- Kaiser Permanente
- KRCC
- Leadville Institute
- Manitou Springs Public Library
- of El Paso County
- Nature and Raptor Center of Pueblo

- Pikes Peak Community Foundation
- Pikes Peak Soaring Society
- Regis University
- Southern Colorado Mountain Grotto
- Space Foundation
- Thegeocachekids
- University of Colorado at Colorado Springs
- Venetucci Farm (PPCF)
- Western Museum of Mining & Industry
- You Can Do the Rubiks Cube

Carnival Day Activity Participants

- *organizations participating in both Carnival and Festival Events
- After School University
- AgentSheets, Inc. & University of Colorado, Boulder
- *Agilent Technologies
- Bear Creek Nature Center
- Black's Magic Productions
- Brain Development Centers
- *Buell Children's Museum/ Sangre de Cristo Arts Center
- *Catamount Institute
- CaveSim
- *Challenger Learning Center of Colorado

- *Cheyenne Mountain Zoo
- Civil Air Patrol, Colorado Springs Cadet Squadron
- Cochlear Americas
- Colorado College Cool Science Club
- Colorado Literacy Foundation
- Colorado Neurological Institute
- *Colorado Springs Astronomical Society
- *Colorado Springs Rocket Society
- Colorado Springs Children's Chorale
- Colorado Springs Fire Department
- Colorado Springs Utilities
- CSU-Pueblo Extension (4H)

- Denver Botanic Gardens
- Destination Imagination Colorado
- Dinosaur Resource Center
- Coronado HS FIRST Robotics Team 2996 Cougars
- Gone Wired
- Estes Rockets
- Falcon High School
- Honors Chemistry
- Fountain Creek Nature Center
- Heuser Chiropractic
- *Imagination Celebration
- Jeff Lewis (SLAM Lab)
- Manitou Springs FIRST Robotics Team
- Millibo Art Theater
- Mindstorms Maniacs

- Palmer High School Chemistry Club
- Penrose/St Francis Hospitals
- Pike's Peak RC Club
- *Pikes Peak Soaring Society
- Science Matters in America
- *Southern Colorado Mountain Grotto
- *Space Foundation
- The Solution is Science
- The Traveling Sea
- University of Colorado School of Pharmacy
- USAFA STEM Club
- USAFA Physics is Phun
- *Western Museum of Mining & Industry