# OCTOBER 13-21, 2012 SCIENCE FOR ALL AGES!



CM

# **Program Guide** www.CSCoolScienceFestival.org

Come learn something amazing about the world around us... Come learn something amazing about the world around us... Come learn something

**BAG-IT FILM SHOWING** 



#### auddillan. SCIENCE FILM SERIES nce Cester Project

Sunday, Oct. 14, 1:30 – 3:30 p.m. This award-winning documentary begins with a focus on plastic bags and evolves into an investigation of plastic and its effect on our waterways, oceans, and bodies. Join this Pikes Peak Library District event and decide for yourself how plastic your life will be. Penrose Library, Adult Meeting Room, 20 N. Cascade

# UNDER THE SHADOW OF FLAMES: A SCIENTIFIC LOOK AT FIRE BEHAVIOR

 Wednesday, Oct. 17, 6:30 – 8:30 p.m.
How embers move, what happens in a plume-dominated fire and a look beneath the smoke of the Waldo Canyon fire with special short-wave infrared technology will be the focus of a discussion and film clins presented by veteran fireficither and clips presented by veteran firefighter and Colorado Springs Fire Department audio-visual specialist Steve Schopper. Stargazers Theatre and Event Center

**GROWTHBUSTERS: HOOKED ON GROWTH** 

**Thursday, Oct. 18, 6:30 – 8:30 p.m.** Are urban development and economic growth goals worth pursuing? Come see Colorado Springes resident Dave Gardner's documentary, which explores this question. Then join a panel discussion immediately following with former UCCS Provost, Peg Bacon as moderator, and noted economist and CCS instructor, Fred Crowley, and Colorado State University professor of economics, Mairi-Jane Fox, as panelists, who will explore the variety of viewpoints on the subject. Carnegie Room, Penrose Library, 20 N. Cascade

## UNDER ANTARCTIC ICE – A PBS DOCUMENTARY

15 Friday, Oct. 19, 7:30 – 8:30 p.m. On the surface, it's the bleakest • On the surface, it's the bleakest of lands, with ferocious winds, flightless birds, and enough ice to flood half the planet's population if it were to melt. But below that frozen mass, a fantastic environment of indescribable beauty teems with life. Come see this film shot over a period of two years by renowned underwater photographer Norbert Wu. *Gaylord Hall, Colorado College, 902 N. Cascade* 

## SNOWMASTODON: ICE AGE DISCOVERY IN COLORADO

34 Saturday, Oct. 20, 6:30 – 8:30 p.m. A recent major archeological discovery of more than 16,000 Ice Age bones near Snowmass, Colo. is promis ing to shed new light on alpine life and climate during the last interglacial period of our region. Co-director of this research project, lan Miller, PhD, of the Denver Museum of Nature and Science, will give details of the dig and the latest findings. This work was featured earlier this year in National Geographic Magazine and on NOVA Armstrong Hall, Colorado College, 14 E. Cache la Poudre

FROM THE BRINK OF EXTINCTION: THE BLACK-FOOTED FERRET

Sunday, Oct. 21, 11:30 a.m. – 1 p.m. Come learn about the recent successful conservation of the presumed-extinct black-footed ferret. Meet that ferret spe-cies up close along with other prairie crit-ters, such as snakes, skunks and prairie does. Short film clines discussion and dogs. Short film clips, discussion and hands-on interaction with the animals! Stargazers Theatre and Event Center, 10 S Parkside Drive

# **REGISTER ONLINE**

www.CSCoolScienceFestival.org

# **SATURDAY, OCTOBER 13**

Cool Science Carnival Day at 9 a.m. – 4 p.m.

Hands-on activities from goop to rockets, exploding demonstrations, science shows, student researchers and much more will kick off this year's Colorado Springs Cool Science Festival at our very popular, signature event! Come join more than 80 organizations during this all-day science carnival. FREE - UCCS Main Campus

#### 2 Star Gazing Party – 10 p.m.

See celestial wonders at the U.S. Air Force Academy (USAFA) Observatory! The Colorado Springs Astronomical Society and USAFA astronomers will show you stars, planets, nebulae, galaxies, and Earthorbiting spacecraft with a variety of telescopes. Bus transportation on south side of USAFA Field House every 15 minutes from 7-10 p.m.. Not handicapped accessible. Cancelled if cloudy. FREE. USAFA Observatory

### **SUNDAY, OCTOBER 14**

#### 3 Bug Out!\* – 6 p.m.

Bugs and spiders - thousands of them, from local to tropical are displayed in a world-renowned exhibit at the John May Museum. Come talk with local experts about insect mounting and view live insects and arachnids. Admission fee, May Natural History Museum, 170 Rock Creek Canyon Rd.

#### Explore the Anasazi \* 4

Where did they go and why? The Anasazi lived in the region's Manitou Cliff Dwellings hundreds of years ago. Come explore the ruins close up. Grind corn like the ancient people did. See their tools and weapons, and learn their history. Admission fee. Manitou Cliff Dwellings, 10 Cliff Dwellings Rd.

## **5** Garden of the Gods Nature Presentations

- Bison! Bison! 11 a.m. – Hummingbirds: Jewels in Flight - Wildcats of Colorado Learn about the diverse wildlife and ecology of Garden of the Gods Park through a variety of indoor presentations which last 20-30 minutes each. FREE, each limited to 15. Garden of the Gods Visitor & Nature Center

## 6 Our Birds of Prey

Peek inside the lives of the resident hawks owls, eagles, falcons and vultures with an informative staff-led talk on these majestic raptors and their marvelous adaptations. FREE, limited to 30. Nature and Raptor Center of Pueblo. 5200 Nature Center Road, Pueblo

Bag It Movie: 7 Is Your Life Too Plastic?

Details and location in Science Film Series box.

## 8 Special Cave Exploration Tour \*

Travel deep underground for a behindthe-scenes look at cave exploration. Meet real cavers, try cave surveying and mapping, learn about cave geology, look for bats and more. Get a new perspective on the science beneath your feet! Admission fee.

## 9 Beer Brewing Science 3-4 p.m.

standing of brewing with a tour as well as a discussion of the microbiology and biochemistry of fermentation. FREE tour, not a beer-tasting event, limited to 15. Bristol Brewery, 1647 S. Tejon

9 Beer Brewing Science See description and location under Sunday #9

Antarctic Discovery: Research on the Ice Details and location in Antarctic Discovery box.

## **ANTARCTIC DISCOVERY: RESEARCH ON ICE**

#### **\* SOUTH POLE SPACE PHYSICS**

All Film Series presentations are FREE!

10 S. Parkside Drive

**Sunday, Oct. 14, 7 – 8:30 p.m.** New technology is allowing scien tists to remotely study near-Earth space environment from the South Pole. Scott Palo, PhD, Assoc. Prof., Aerospace Engi-neering, University of Colorado at Boulder will discuss how the bridging of basic research and engineering is allowing scientists to study the physics of space. *Olin 1 Room, Colorado College,* 1010 N. Nevada

understand the development of the conti-902 N. Cascade

## \* ANTARCTICA'S METEORITES: A VIEW TO OUR SOLAR SYSTEM

Tuesday, Oct. 16, 7 - 8:30 p.m. The abundance of meteorites found in Antarctica offers an unparalleled look into the make-up of asteroids, planets and other bodies of our solar system. Chris tian Schrader, PhD, visiting Asst. Prof., Geology, Colorado College, will share the latest findings and importance of the Antarctic Search for Meteorites. – *Olin 1* Room, Colorado College, 1010 N Nevada Ave

#### **\*** FROM THE BOTTOM OF THE EARTH UP

15 Wednesday, Oct. 17, 6:30 - 7:30 p.m. Living and working on the coldest, driest, windiest, emptiest and highest continent on Earth has immense logistical challenges. Katy Jensen, an Antarctic Support Contract Manager, and Colorado College graduate, will share details of her decade-long South Pole experiences,

**MONDAY, OCTOBER 15** 

See descriptions and location under Sunday #5

Garden of the Gods Nature Presentations

n – Bear Éssentials

Lego Robotics

- Peoples of the Red Earth

5

including what it is like to winter-over at the remote Amundsen-Scott South Pole Station. - Gaylord Hall, Colorado College, 902

## \* BACK TO THE FUTURE WITH SOUTH POLE TELESCOPES

Wednesday, Oct. 17, 7:30 – 8:30 p.m. Conditions at the South Pole make 902 N. Cascade

## \* WHAT CAN WE LEARN FROM THE CLEANEST AIR ON EARTH?

#### **\* UNDER THE ICE WITH A ROBOT**

Friday, Oct. 19, 6:30 - 7:30 p.m. Surveying Antarctic seafloor comer Ice Navigation and Imaging (SCINI) Gaylord Hall, Colorado College, 902 N. Cascade

## UNDER ANTARCTIC ICE – A PBS DOCUMENTARY

**15** Friday, Oct. 19, 7:30 – 8:30 p.m. On the surface, it's the bleakest of lands, with ferocious winds, flightless birds, and enough ice to flood half the planet's population if it were to melt. But below that frozen mass, a fantastic environment of indescribable beauty teems with life. Come see this film shot over a period of two years by renowned underwater photographer Norbert Wu. Gaylord Hall, Colorado College, 902 N. Cascade

# \* U.S. ANTARCTIC PROGRAM: BREAKTHROUGHS AND CONTRIBUTIONS

15 Saturday, Oct. 20, 6:30 – 7:30 p.m. Thousands of scientists from all over the world live and work on ice in Antarctica each year. Dave Bresnahan, a 40-year veteran of the U.S. Antarctic Program (USAP), will explain what USAP is and how it is working to further con-temporary research in Antarctica. – *Olin 1* Room, Colorado College, 1010 N. Nevada

## **\*** BLAZING ICE: PIONEERING THE 21ST CENTURY'S ROAD TO THE SOUTH POLE

15 Saturday, Oct. 20, 7:30 – 8:30 p.m. A thousand-mile transcontinental "haul route" across Antarctica now pro vides a less-expensive and more efficient method for supplying the South Pole with fuel, materials and oversized cargo. Antarctic veteran John Wright led the historic South Pole Traverse proof-of-concept project and will discuss the challenges of opening this route as well as his book on the subject, Blazing Ice. – Author-signed copies will be available for purchase. – Olin 1 Room, Colorado College, 1010 N. Nevada Antarctic Discovery presentations are FREE!

LEGO robot and program it to perform! 3rd-6th grade. FREE, Limited to 50. Monument Library, 1706 Lake Woodmoor Dr., Monument

Science as Inquiry: Outside the Book 12 Teacher Workshop with CDE Credit

Middle and high school science teachers are invited to this free workshop which earns two contact hours towards recertification. Come learn from professionals how to incorporate open inquiry into your classroom, how to inspire students through their own research questions and how your students can benefit from participating in various science competitions. Preregistration required. FREE, limited to 40. BSCS, 5415 Mark Dabling Blvd.

## Kids, Cooking and Science!\*

Understand the science behind foods you eat! Why does popcorn pop? Why does quick stirring change liquid whipping cream into a solid? What is a reduction? Experience how things you eat every day are made. Ages 8–12, Insurance waiver and fully enclosed shoes required, limited to 12. \$18/per child.

Come learn something amazing about the world around us... Come learn something amazing about the world around us... Come learn something

From factories and hospitals, to a war

repetitive tasks. Come build your own

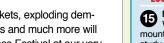
zone or the common household, robots are increasingly available to accomplish

2 PAID INSERT

Cave of the Winds, Manitou Springs

Discuss beer-brewing science with the experts! Get a behind-the-scenes under-





# \* BETWEEN A ROCK AND A COLD PLACE: LOOKING BENEATH THE ICE SHEET

Monday, Oct. 15, 7 - 8:30 p.m. West Antarctica features large mountains, and the recent geological study of this area is helping scientists nental crust as well as the Earth's current arrangement of continents. Christine Siddoway, PhD, Professor, Geology, Colorado College, will tell listeners about discoveries she has been involved with during years of study on the southernmost continent. – *Gaylord Hall, Colorado College,* 

# N. Cascade

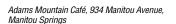
it ideal for observing microwave background radiation which can provide details about distant galaxies and the origins of the universe. Paul Sullivan, Antarctic Support Contract South Pole Science Coordinator, will explain work of the large South Pole Telescope and facilitate a 20-minute live video conference with South Pole scientists. – Gaylord Hall, Colorado College,

Thursday, Oct. 18, 7 – 8 p.m. Scientists are learning much in Antarctica about global climate. Come learn about measuring the atmosphere at the geographic Pole. Brian Vasel, National Oceanic and Atmospheric Administration, Director of Observatories, Global Monitor ing Division will discuss the stratospheric ozone hole, Antarctic ice core records, the importance of long-term observations, and much more.

– Olin 1 Room, Colorado College, 1010 N. Nevada

Б munities for the first time, a specially designed underwater robot has made it possible for researchers to have images of unidentified species and comple ecosystems surviving under the 800-foot-thick Ross Ice Shelf. Bob Zook, electronic engineer with the Submersible Capable of will detail the development, deployment and technical aspects of the robot as well as share images from beneath the ice.

## amazing about the world around



## Science on Tap 6:30 – 8 p.m.

How do we perceive time? How does our sun affect climate? And, what's happening to make algae be the next biofuel source? Come hear from lo cal award-winning young scientists of the 2012 Pikes Peak Regional Science Fair. FREE (drinks/food must be purchased.) Jack Quinn Pub 2nd floor, 21 S. Tejon St.

#### Between a Rock and a Cold Place: Looking Б Beneath the Ice Sheet

– 8:30 p.m. Details and location in Antarctic Discovery box.

### **TUESDAY, OCTOBER 16**

Garden of the Gods 6 Nature Presentations 11:30 a.m. – Wildlife in the Garden See descriptions and location under Sunday #5.

#### Rain Machine Noon – 6 p.m. 16

Come experience this energizing and evocative marvel of simple water en-gineering created by artist Eric Tillinghast in this 2800-square-foot gallery. This work inspires thought on systems, art, and most importantly water. FREE. Centennial Hall, Suite 201, UCCS Main Campus

#### County Coroner Crime Lab Tour Ð

Get a look behind the scenes of the El Paso County Coroner's Office and forensics crime lab. See up close and personal how real-life CSI works and how this important science-rich county office functions. FREE limited to 25.

County Coroner's Office, 2743 E. Las Vegas St.

## Money Science

Anti-counterfeiting strategies can include anything from material to design. Learn what strategies are most effective by trying to copy four examples of fake money. Then, make your own and challenge others to counterfeit it. FREE, limited to 12. The Money Museum, 818 N. Cascade Ave.

## 9 Space Foundation Festival of Science

This evening will be packed full of hands-on activities in science, technology, engineering, art, and mathematics fun from science-related organizations along the Front Range. Join the Chevenne Mountain Zoo. Estes Rockets, Cool Science, Imagination Celebration, National Weather Service, Colorado Springs Rocket Society and more! FREE

Space Foundation Discovery Institute, 105 Coleridge Ave.

## Inquiring Into Inquiry Teacher Workshop with CDE Credit -8:30 p.m. Ð

What is scientific inquiry? What does inquiry look like in the science classroom? This hands-on session focuses on the practices of science and inquiry science teaching, and how they can be effectively incorporated into the classroom. Attendees can receive 2 hours of continuing educa-tion credit. FREE BSCS, 5415 Mark Dabling Blvd

Significant Archaeological Sites of Western Europe

Join us as archaeologist Mark Mann, a Natural and Cultural Resources Manager at Peterson Air Force Base, presents a guided tour of numerous archaeological sites in Western Europe, including Herculaneum and Pompeii, which vanished and were preserved beneath a thick layer of volcanic ash in AD 79. FREE, limited to 25. Community Fire Station #19, 2490 Research Pkwy.

# Antarctica's Meteorites: A View to Our Solar System

Details and location in Antarctic Discovery box.



County Coroner Crime Lab Tour Electric-powered acrobatic airplanes, gliders and scaled models of specific planes

will soar through the sky. Learn about flight

See description and location under Tuesday #16

Downtown Lunchtime Sun

In the downtown area for lunch? Stroll

outside along Tejon St. to join the Colorado Springs Astronomical Society on the Pio-

neers Museum lawn for an up close and

through telescopes to see the sun's face laid bare, check out current sun-spot activ

ity, and other high resolution details, FREE

personal look at the mid-day sun! Peer

Pioneers Museum West Lawn, Tejon St.

principles and controlling the models in flight. FREE, limited to 75.

Pride Soccer Field, Woodmen Rd Just east of Marksheffel Rd.

**Rain Machine** Noon – 6 p.m.

Viewing Party

1:30 p.m

23

See description and location under Tuesday #17 Money Science

B See description and location under Tuesday #18

#### The Science of Winemaking 24 – 6:30 p.m.

Enjoy wine? Ever wonder how wine is made? Come learn the science of that divine indulgence. Wine tasting afterwards. FREE, limited to 15. D'Vine Wine, 934 Manitou Ave. Ste. 108, Manitou Springs

From the Bottom of the Earth Up 6:30 – 7:30 p.m. Б Details and location in Antarctic Discovery box.

Back to the Future with South Ð Pole Telescopes

Details and location in Antarctic Discovery box,

– 8:30 p.m Details and location in Science Film Series box.

# THURSDAY, OCTOBER 1'8

Story Time with Sid the Science Kid 10:30 a.m. – Noon

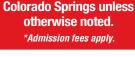
Sid the Science Kid (on video) and science fun will highlight this Story Time. Crafts, stories, and hands-on activities will help preschoolers learn more about the world around us. FREE, limited to 25. Manitou Springs Public Library 701 Manitou Ave.

Pueblo

6

**Rain Machine** See description and location under Sunday #16





All events are in

-2 p.m What happens to that plastic container after the recycle truck takes it away? Learn about southern Colorado's only recycling facility and what happens to most of the recyclables that are collected. FREE limited to 25. Bestway Recycling, 4005 Interpark Dr.

**Explore the Anasazi**\* 2-5 nm

•5 p.m. See description and location under Sunday #4

amazing about the world around us... Come learn something amazing about the world around us... Come learn something amazing about the world

PAID INSERT 3

<u>22</u>

24

larksheffel

## Come learn something amazing about the world around us... Come learn something amazing about the world around us... Come learn something

County Coroner Crime Lab Tour

See description and location under Tuesday #17

## 18 Money Science

See description and location under Tuesday #18

## Cool Strategies to Help Students Make Sense of Science Teacher Workshop with CDE Credit

What's cool in your science classroom? Come to this session and learn strategies to use in your classroom to help students make sense of science concepts. You will learn these strategies in the context of a new, online middle school science curriculum that is free. These strategies can be used with any curriculum for grades 4 and older. FREE, limited to 40 BSCS, 5415 Mark Dabling Blvd

## **Growthbusters:** Hooked on Growth Details and location in Science Film Series box.

What Can We Learn from

Ð the Cleanest Air on Earth?

Details and location in Antarctic Discovery box

## **FRIDAY, OCTOBER 19**

16 Rain Machine See description and location under Tuesday #16

#### Garden of the Gods 6 Nature Presentation

- Bats in the Garden See descriptions and location under Sunday #5.

26 Science is Cool at the Manitou Library

Science experiments, activities and crafts will be available for elementary-aged chil dren to learn more about our world! FREE, limited to 25

Manitou Springs Public Library, 701 Manitou Ave. 18 Money Science

 $3 - 5 \, \text{p.m.}$ See description and location under Tuesday #18

Wildland Fire Science 29 and Ecology Seminar\*

3-6 p.m Learn about the relationship between fire, humans and landscape during this wildland

fire science field trip. Explore basic fire behavior and ecology as well as fire safety using controlled live fire experiments. Must be 9 years or older, accompanied by adult, limited to 20. \$8 person. Catamount Institute, Beidleman Environmental Center, 740 W. Caramillo St.

#### Kids Book Author Reading: The Last Launch: Liftoff 30

Enjoy a reading of the children's book about NASA, "The Last Launch: Liftoff," by the author Pam Carothers. FREE, limited to 30. Business of Art Center, 513 Manitou Ave

#### Cool Science Festival's 14 Downtown SCVNGR Hunt

Using your smart-phone and the SCVNGR app, players have two hours to accrue points by completing challenges all over downtown. Prizes

at 8:30 p.m. – 1st place chooses from: Dropcam HD Wi-Fi Wireless Video Camera, Solar Joose Orange Charger, or a Magic Wand Programmable TV remote. 2nd place gets next choice, 3rd place remaining prize. FREE, limited to 125.

Math and science come together in rock climbing gear which is often stronger than us! Come learn about the forces generated by different types of climbing falls and see a dramatic demonstration of dropping and

Film: Under Antarctic Ice

Watch power come alive at the museum's

functioning Lego models, experience flight with simulators from Denver's Wings Over the Rockies Air & Space Museum, experiment with levers, wheels or axles and invent your own machine at a building station. Regular museum admission fee. Western Museum of Mining and Industry, 225 North Gate Blvd.

## Model Rocket Launch

Ever see a fire hydrant fly? How about an Egyptian pyramid? Come watch the launching of many types of model rockets all day and bring your own! Free motors will be available for your launch and we'll show you how. FREE. *Challenger Middle School, 10215 Lexington Dr.* 

38 Slim Rail Model Railroad Exhibition\*

Explore early transportation systems in Colorado with operating dioramas of historic Colorado narrow gauge railroad lines. Slim Rail experts will demonstrate model railroad operations and answer questions Admission fee.

Rampart High School, 8250 Lexington Dr.

## 35 The Rubik's Cube Competition

How guickly can you solve a Rubik's Cube? Come watch student teams race to solve a set of 25 cubes during our 2nd annual Ru-bik's Competition! Sox the Fox and SkySox emcee Jon Eddy will be at the competition to cheer on the teams! FREE The City Auditorium, 221 E. Kiowa St.

#### Geocache Treasure Hunt 10 a.m. – 12:30 p.m.

Geocaching and solving science puzzles of all levels will guide you on this outdoor exploration. Just basic skills needed to find the coordinates of a geocache and then treasure! No experience necessary. FREE limited to 100. Western Museum of Mining and Industry, 225

North Gate Blvd. 4 Explore the Anasazi\*

See description and location under Sunday #4

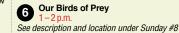
#### 18 Money Science m. – 4 p.m

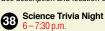
Programs at 10:30 a.m., 12:30 p.m. and 2:30 p.m. See description and location under Tuesday #18

Furs, Feathers, Scales and Skin' 37

Geckos, snakes, spiders, frogs and more will be a part of "The Wildlife Experience" organization's program. See their 30-minute shows at 11:30 a.m. and 1:30 p.m. with an interactive exhibit available at all other times. Admission fee. Rocky Mountain Dinosaur Resource Center, 201 S. Fairview St., Woodland Park

**Garden of the Gods** Nature Presentation 12:15 p.m. – Pikes Peak Gold Rush of 1859 See descriptions and location under Sunday #5.





Teams of three to four people can join forces to win prizes by answering fun science trivia. Topics will include science history, earth sciences, and much more. Come have a drink with Student Members of the American Chemical Society and test your knowledge. FREE to play. Clydes Pub, Student Center, UCCS Main Campus

Snowmastodon: Ice Age Discovery in Colorado 34 8:30 n m

Details and location in Science Film Series hox.

U.S. Antarctic Program: Б Breakthroughs and Contributions '·30 n m Details and location in Antarctic Discovery box

Blazing Ice: Pioneering the 21st

Century's Road to the South Pole Details and location in Antarctic Discovery box.

### **SUNDAY, OCTOBER 21**

#### Pikes Peak Science Train!" 35 $10.10 \, \text{a} \, \text{m} - 4.30 \, \text{n} \, \text{m}$

Learn about the geology, forestry, flora and fauna of Pikes Peak as you ride to the top on the Cog Railway! After your guided ride back down, discover more about this unique railway in a tour of the Cog engine shop. Train departure time will be 10:40 a.m. Advanced ticket purchase required, see Cog Railway website: www.cograilway.com. Pikes Peak Cog Railway, 515 Ruxton Avenue, Manitou Springs

## 25 From the Brink of Extinction: The Black-Footed Ferret Details and location in Science Film Series box

**36** Forces, Friction and Music: Colorado College's Bowed Piano Ensemble Demonstration

Forces and friction create vibration. sounds and music. Come experience a short performance/demonstration from the world-renowned Colorado College Bowed Piano Ensemble: ten musicians presenting an imaginative creation of orchestral sound from one grand piano. After the demo-per-formance, kids can learn about extended piano techniques "hands-on" on stage. Packard Hall, Colorado College, 5 W. Cache La Poudre St., Colorado Springs, CO

## Bristol Brewery – Beer Brewing Science

See description and location under Sunday #9

# 9 Bristol Brewery – Beer Brewing Science

See description and location under Sunday #9

### ADDITIONAL. NON-PUBLIC EVENTS

Agilent Hardware Facility Tour Two area fifth-grade classes will tour Agile nt'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

#### Girls' STEM Program

A day-long program for 6-8th grade girls selected by their schools to encourage them in science, technology, engineering and math (STEM). The day will include chemistry and physics demonstrations, experiments, and hands-on activities designed to engage.

## PRE-FESTIVAL EVENT, FRIDAY, OCTOBER 12

#### Improv with "Stick Horses in Pants' 10 p.m.

The improv comedy troupe that draws its humor from everyday situations will have an evening of laughter specifically for the Cool Science Festival. Join this group of talented comics for a night of laughs as they take aim at the quirky world of science – The Loft, 2506 W. Colorado Ave. #C



EVENT PARTICIPANTS • Adams Mountain Café • Agilent • American Numismatic Association • Antarctic Support Contract • Bestway Disposal • Black Cat Books • Bristol Brewing Company • Catamount Institute • Cave of the Winds • Cheyenne Event PARTICIPARTS Addams Mountain Cafe Aguent American Numisatic Association • Antarctic Support Contract • Bestway Disposal • black Car books • Instol brewing Company • Catamount institute • Cave of the Winds • Cheyenne Mountain Zoo • CityROCK • Colorado Archaeological Society Pikes Peak Chapter • Colorado Campus Company • Catamount institute • Cave of the Winds • Cheyenne life • Colorado Springs Astronomical Society • Colorado Archaeological Society Pikes Peak Chapter • Colorado Sorings Rocket Society • Denver Museum of Nature and Science • D'vine Wines • El Paso County Coroner's Office • Garden of the Gods Visitors Center • Geocache Kids • Girls STEM • Jack Quinn's • Manitou Cliff Dwellings • Manitou Springs Public Library • May Natural History Museum • Monument Library • National Oceanic and Atmospheric Administration's Earth System Research Laboratory • Na-ture and Roptor Center of Pueblo • Pikes Peak Cog Railway • Pikes Peak Library District • Pikes Peak Regional Science • Tire • Pikes Peak Cog Railway • Pikes Peak Library District • Pikes Peak Regional Science • Storages Theatre and Events Center • Stick Horses in Pants • Student Members of the American Chemist Society • Thompson Machine Works • UC Boulder • UCCS Galleries of Contemporary Art • United States Antarctic Program • University of Colorado at Colorado Springs • U.S. Air Force Academy Observatory • Western Museum of Mining and Industry • Wildlife Experience • Williams Canvap Project • Winds • Con Do the Mublic's Cube Equindation Williams Canyon Project • Wings over the Rockies • You Can Do the Rubik's Cube Foundation

CARNIVAL DAY PARTICIPANTS • AgentSheets, Inc. • \*Agilent • American Birding Association • \*American Numismatic Association • Black's Magic • Blue Skies Exploration Academy • Buell Children's Museum • Butterfly Pavilion • \*Catamount Institute • Colorado College Psychology Department • CoPIRG Energy Service Corps • CO Neurological Institute • Colorado Springs Cadet Squadron • Cochlear Americas • Colorado College Cool Science Club • Colorado College Math Department • Colorado College Psychology Department • CoPIRG Energy Service Corps • CO Neurological Institute • Colorado Springs Cadet Squadron • Cochlear Americas • Colorado Springs Mineralogical Society • Colorado School of Mines Bechtel Educational Excellence Initiative • Colorado Springs Children's Chorale • \*Colorado Springs Pioneers Museum • \*Colorado Springs Astronomical Society • Colorado Springs Utilities • Coble Cd Science Discovery • CU Skaggs School of Pharmacy and Pharmaceuical Sciences • Denver Botanic Gardens • \*Denver Museum of Nature Canter • Keystone Science School • KOAA • KRCC • Lake George Gem and Mineral Society • Lewis Palmer High School • Manitou Springs High School FIRST Robotics Team 2945 • \*May Natural History (Masteat) • Mile High School Chemistry Club • Pikes Peak Peble Pup • Pikes Peak Radio Control Club • \*Rocky Mountain Dinasaur Resource Center • \*Rocky Mountain Robotics • Science Matters • Simply Kids Dental • Sky Venture • States • Studenter • Mineral Science • Neurological Neuroing Searce Center • \*Rocky Mountain Robotics • Science Contrado • KRCC • Lake George Gem and Mineral Society • Lewis Palmer High School • Manitou Springs • Rocky Mountain • Northrop Grumam • Ormao Dance Company (Matteat) • Palmer High School Chemistry Club • Pikes Peak Radio Control Club • \*Rocky Mountain Dinasaur Resource Center • \*Rocky Mountain Robotics • Science Auters • Simply Kids Dental • Sky Venture • States • Studenter • States • Colorado Vision Therapy • \*Space Foundation • The Traveling Sea • UCCS Student Members of the American Chemical Society

\*organizations participating in both Carnival and Festival Events

Jack Quinn Pub 2nd floor, 21 S. Tejon St.

**15** Under the Ice with a Robot 6:30 - 7:20 p m

## Details and location in Antarctic Discovery box.

31 The Forces of Falling

breaking things. FREE, waiver required which may be completed at the event. Limited to 60

CityRock Climbing Center, 21 N. Nevada

Power Up at WMM&I!\* 32

10 a.m. – 12:30 p.m

special Cool Science collaboration! See

Details and location in Antarctic Discovery box. **SATURDAY, OCTOBER 20**