

VIRGINIA TECH



SCIENCE FESTIVAL

October 27, 2018



10:00 - 4:00 Festival expo

4:30 - 6:00 Nutshell Games at the Moss Arts Center

www.vt.edu/sciencefestival

SCIENCE IS IN THE ARTS

Moss Arts Center, Galleries

1

SWARM

Moss Arts Center, Virginia Tech
Ages 8 and up

SCIENCE IS ASKING QUESTIONS

Moss Arts Center, Turner Street entrance

1

Science in Real-time

Center for Research in Science, Engineering, Arts, and Design Education, Virginia Tech
All ages

SCIENCE IS COMMUNICATION

Moss Arts Center Learning Studio, Room 253

1

Alchemically, an Educational Role-Playing Game

Creative Technologies, Virginia Tech
Ages 8 and up

The Gardenator: How Well Do You Know the Garden?

Tech on the Trail, Virginia Tech
All ages

Write to Excite: Exploring Writing in Engineering and the Sciences

Engineers' Forum, Virginia Tech
Ages 5 and up

Data Distortion - Sea Surface Temperature Rise

School of Visual Arts, Virginia Tech
All ages

Coding Kids - Exploring Computer Science in Information Technology

Department of Information Technology, Virginia Tech
Let's Code Blacksburg!
Ages 8 and up

SCIENCE IS SENSOY-FRIENDLY

Moss Observation Room, Room 251

1

Sensory-Friendly Space

Center for Autism Research, Virginia Tech
All ages

SCIENCE IS IN THE CUBE

Moss Arts Center, Cube

2

Bringing Fossils Back to Life: an Immersive Documentary

10:00 a.m. - 12:00 p.m.
Paleobiology Research Group
Institute for Creativity, Arts, and Technology, Virginia Tech
All ages

Under the Net (United Nations Foundation's 360° documentary experience)

12:00 p.m. - 2:00 p.m.
United Nations Foundation / Nothing But Nets
School of Visual Arts, Virginia Tech
Ages 8 and up

The Visual Language of Chromatin

2:00 p.m. - 4:00 p.m.
Entomology, Computer Science, School of Visual Arts, supported by the Institute for Creativity, Arts, and Technology, Virginia Tech
All ages

SCIENCE IS BIGGER THAN YOU THINK

Moss Arts Center, Grand Lobby

3

Virus Tracker

Biocomplexity Institute, Virginia Tech
All Ages

Multiply

Moss Arts Center, Virginia Tech
All ages

4-H Science: Drone Discovery

Virginia 4-H
Department of Agricultural, Leadership, and Community Education, Virginia Tech
Ages 5 and up

Inspire Kids to Do Science

Virginia 4-H, Virginia Cooperative Extension
Virginia Cooperative Extension, National 4-H
Virginia Tech
Ages 5 and up

The Magical World of Microbes

Novozymes Biologicals, Inc.
Ages 8 and up

Exploring the Solar System

Roanoke Valley Astronomical Society
Ages 5 and up

Science Museum of Western Virginia

Science Museum of Western Virginia
Ages 5 and up

Science at VT!

College of Science, Virginia Tech
All ages

Responsive Interior Surface // BarkLight

School of Architecture + Design, Department of Computer Science, Virginia Tech
Ages 11 and up

SCIENCE IS ROBOTICS

Moss Arts Center, Grand Staircase

4

Musical Interactions with Robots and Computers

The Mind Music Machine Lab, Virginia Tech
All ages

Code-Program-Control

Institute for Creativity, Arts, and Technology, Virginia Tech
All ages

3D Printing with the DREAMS Lab

DREAMS Lab, Virginia Tech
All ages

e-Nable: A Global Network of Volunteers Delivering Free 3D-Printed Prosthetics

e-Nable: A Global Network of Volunteers Delivering Free 3D-Printed Prosthetics
e-Nable: A Global Volunteer Network Giving the World a Helping Hand
Ages 5 and up

SCIENCE IS WELL-BEING

Moss Arts Center, Orchestra Lobby

4

Carilion Children's Teddy Bear Clinic

Carilion Children's of Carilion Clinic
All ages

Humpty Dumpty Seat Belt Safety - Buckle Up

Carilion Clinic / Carilion New River Valley Medical Center Trauma Services
All ages

DermaScan - See the Light of Skin Damage

Carilion Clinic / Carilion New River Valley Medical Center
Ages 5 and up

Better Breathers Respiratory Therapy

Jefferson College / Carilion
All ages

da Vinci Xi Surgical Robotic System

Carilion Clinic / Carilion New River Valley Medical Center
Intuitive
Ages 5 and up

SCIENCE IS LIFE

Moss Arts Center, Mezzanine Lobby

5

Adventure meets Research: Citizen Science and Technology on the Trail

Department of Computer Science, College of Engineering, Virginia Tech
Ages 5 and up

Creepy Carnivorous Plants

Hahn Horticulture Garden, Virginia Tech
All ages

Inside Reptiles (and You)

McGlothlin Lab, Department of Biological Sciences, Virginia Tech
All ages

Illusions as a Tool for Science

The Socha Lab, Virginia Tech
All ages

Paleontological Research Opportunities and Fossils, Too

Paleobiology, Virginia Tech
All ages

Our Green World

Massey Herbarium, Virginia Tech
All ages

Understanding Ticks and Lyme Disease in the New River Valley

Fralin Life Science Institute
College of Agriculture and Life Sciences, Virginia Tech
All ages

Microbiology in Your Daily Life

Microbiology Club, Virginia Tech
All ages

The Student Chapter of the Wildlife Society at Virginia Tech













The Student Chapter of the Wildlife Society
Fish and Wildlife Natural History Collection, Virginia Tech
All ages

Strawberry DNA Extraction

Biomedical Engineering Society
Onco-Engineering Lab, Virginia Tech
Ages 5 and up

More...

 SAFE - Supporting Autism-Friendly Environments. Exhibitors who attended a SAFE Mentor training.

Alumni Mall: 	Torgersen Hall:  1st Floor	Newman Library:  1st Floor  2nd Floor  4th Floor
Moss Arts Center:  2nd Floor, Galleries, Turner St.  Cube  Grand Lobby  Grand Staircase, Orchestra Lobby	 Mezzanine Lobby  Balcony Lobby  Portico, Lawn	

SCIENCE IS THE EARTH

Moss Arts Center, Balcony Lobby

6

Learning About Weather Processes Can Be Fun

Meteorology Club, Virginia Tech
Ages 8 and up

Hands-On Volcano Deformation Demonstration and Data Stream

Geodesy and Tectonophysics Laboratory
Geosciences Modeling and Educational
Demonstrations Laboratory, Virginia Tech
Ages 5 and up

Minerals: Treasures of the Earth

Geology Club, Virginia Tech
Ages 8 and up

Looking Down is Looking Up: How we Learn from Aerial Photography

College of Natural Resources and Environment
Departments of Geography, and Forest Resources
& Environmental Conservation, Virginia Tech
Ages 5 and up

Watershed Engineering & Education with LEWAS

Learning Enhanced Watershed Assessment
System, Virginia Tech
Ages 11 and up

Stream Team Build-A-Stream

Biology Department - Stream Team, Virginia Tech
All ages

NanoEarth: What is Nano and What Does It Have to Do with the Earth and the Environment?

NanoEarth
Center for Sustainable Nanotechnology, Virginia Tech
Ages 5 and up

Assessing Water Quality of Local Water Bodies

American Water Resources Association Student
Chapter, Virginia Tech
Ages 8 and up

SCIENCE IS MESSY

Moss Arts Center, Portico

7

The Human Powered Submarine

Human Powered Submarine, Virginia Tech
Ages 8 and up

Magnetic Shenanigans

Center for Enhancement of Engineering Diversity,
Virginia Tech
All ages

Science of Slime: Non-Newtonian Fluids in Action

Da Vinci Living Learning Community
Curie Living Learning Community, Virginia Tech
All ages

Are You Gellin'?

Moore Research Group, Virginia Tech
Ages 5 and up

The Power of Polymers

Schulz Research Group, Virginia Tech
Ages 5 and up

Playing with Polymers

Children's Museum of Blacksburg
All ages

FIRST Team 401 Copperhead Robotics Demonstration

Montgomery County Public Schools
Ages 8 and up

SCIENCE IS MESSY

Moss Arts Center, Lawn

7

Everyday DNA

Department of Biochemistry, Virginia Tech
Ages 5 and up

Soil Liquefaction

Earthquake Engineering Research Institute,
Virginia Tech
All ages

Exploring the Solar System with Telescopes

Roanoke Valley Astronomical Society
Ages 5 and up

Rocketry

Rocketry, Virginia Tech
Ages 8 and up

Rad Rockets

School of Education, Integrative STEM Education
Program, Virginia Tech
Ages 5 and up

SCIENCE IS ON THE ROAD

Alumni Mall

8

Carilion Ground Transportation Ambulance

Carilion Clinic Patient Transportation
All ages

Carilion Children's Ambulance

Carilion Clinic Patient Transportation
All ages

Hybrid Electric Vehicle Team at Virginia Tech

Hybrid Electric Vehicle Team, Virginia Tech
All ages

Motorsports Formula SAE

Motorsports Formula SAE, Virginia Tech
Ages 8 and up

Baja

Baja SAE, Virginia Tech
Ages 5 and up

BOLT at Virginia Tech

BOLT, Virginia Tech
All ages

Inspiration Lab

Institute for Advanced Learning and Research
Ages 5 and up

SCIENCE IS SAFETY

Torgersen Hall, Room 1100

9

Helmet Ratings: Is Your Sports Helmet Safe?

Helmet Research Lab, Virginia Tech
All ages

Technology in Motion - How Computers Move Us

SAFE-D National University Transportation Center
Virginia Tech Transportation Institute, Virginia Tech
Ages 5 and up

Brain Drain: The Role of Fluid Flow in Brain Cancer

Onco-engineering Lab
Biomedical Engineering Society, Virginia Tech
All ages

Seeing Your Mind Through Your Eyes!

iLanguage, Executive Function, Attention,
Parenting Laboratory (iLEAP), Virginia Tech
All ages

Deception of the Senses

Neuroscience Club, Virginia Tech
Ages 5 and up

SCIENCE IS MOTION

Torgersen Hall, Atrium

9

VT Physics Outreach

Physics Department, Virginia Tech
All ages

Wind Power

Wind Turbine Team, Virginia Tech
All ages

Seeing Engineering Everywhere: Hands-On with the VT PEERS Project

Department of Engineering Education,
Virginia Tech
Ages 5 and up

Exploring Circuits

Institute of Electrical and Electronics Engineers,
Virginia Tech
Ages 5 and up

The Color Project TM Chromilluminator

The Color Project TM
Equity Through The Arts
All ages

Engineering and Scientific Applications of Autonomous Drones

Autonomous Drone Team, Virginia Tech
Ages 8 and up

SCIENCE IS HANDS-ON

Torgersen Hall, Room 1120

9

Building with Dirt

Geotechnical Student Organization,
Virginia Tech
Ages 5 and up

SCIENCE IS HELPFUL

Torgersen Hall, Room 1140

9

Making Technology Accessible

Technology-enhanced Learning and Online
Strategies, Virginia Tech
Ages 5 and up

SCIENCE IS PROCESS

Newman Library, New River

10

Newman Library Technology Showcase

University Libraries, Virginia Tech
Ages 5 and up

FabLab Club

Virginia Western Community College
Ages 5 and up

Crystal Critters













All ages

The Curiosity Shop: Physics Demonstrations to Stir Your Curiosity

The Curiosity Shop
Ages 5 and up

More...

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 Mezzanine Lobby	 Balcony Lobby	 Portico, Lawn		

SCIENCE IS PROCESS

Newman Library, Multipurpose Room

10



Teaching Engineering and Kinematics

TEK Robotics, Virginia Tech
All ages

The Balance of Nature

Interfaces of Global Change
Global Change Center, Virginia Tech
Ages 5 and up

Flow of Molecules

Department of Mechanical Engineering, Virginia Tech
Ages 8 and up

Retooling Bamboo Tectonics: From Vernacular Aesthetics to Digitally Grown and Fabricated Assemblies

School of Architecture + Design, Virginia Tech
All ages

SCIENCE IS PROCESS

Newman Library, Room 124

10



Multi-Cultural and Multi-Modal Sci-Fi

Athenaeum (A Space for the Digital Humanities), Virginia Tech
All ages

SCIENCE IS PROCESS

Newman Library Fusion Studio, Room 2010

11

From Idea to Object: Learn about 3D Printing and Design with 3D Design Studio

University Libraries, Virginia Tech
Ages 8 and up

SCIENCE IS PROCESS

Newman Library Fusion Studio, Room 2030

11



Finding Bigfoot: A Data Documentary

University Libraries Data Viz Studio
University Libraries Informatics Lab, Virginia Tech
Ages 5 and up

SCIENCE IS PROCESS

Newman Library, Fourth Floor

12

Virtual Environments Studio

University Libraries, Virginia Tech
Ages 5 and up

SCIENCE IS ENTERTAINMENT

Roaming

501st Legion Garrison Tyranus Serenno Squad

501st Legion Garrison Tyranus
All ages



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VIRGINIA TECH.



MOSS
ARTS
CENTER



SILVER

Science Museum of Western Virginia
Virginia Tech College of Science
Virginia Tech Department of Mechanical Engineering
Technology-enhanced Learning and Online Strategies (TLOS)
Novozymes

BRONZE

Virginia Tech Center for Autism Research
Carilion Clinic