



PHYSICS & ENGINEERING FESTIVAL

Affiliate Festival to the USA Science & Engineering Festival

April 9, 2016 10:00am - 5:00pm

Hands on Science Exhibits

10:00 am - 3:30 pm	An interactive science exhibition! Kids of all ages (and grown ups, too) are invited to experience and be astounded by all kinds of amazing phenomena.	Mitchell Physics and Mitchell Institute Buildings
11:00 am 1:00 pm 2:30 pm	Amazing Science Circus shows by Rhys Thomas A rare blend of science, comedy and circus arts, Science Circus is physics taught with hilarity and dexterity.	Mitchell Physics Lecture Hall (2nd Floor)
11:00 am	Public Lecture: Nobel Laureate Dudley Herschbach	Hawking Auditorium (MIST)
1:00 pm	Public Lecture: Nobel Laureate David Lee	Hawking Auditorium (MIST)
2:00 pm	Public Lecture: Astronaut Bonnie Dunbar	Hawking Auditorium (MIST)
4:00 pm	Public Lecture: Physicist and Author Sean Carroll	Mitchell Physics Lecture Hall (2nd Floor)

Low Temperature Extravaganza with Professor Glenn Agnolet

10:30 am, 12:00 pm, 1:30 pm, 3:00 pm
Room 213 MPHY (Mitchell Physics Building)

Large Hadron Collider Virtual Tours

12:00pm & 1:30pm || MPHY 331 (Mitchell Physics Building)

LHC team will be present all day to answer questions and describe the research at CERN/CMS/LHC.

5-Barrel Depth Charge

3:30 pm - South-side of Mitchell Physics Building

Tour of Tonight's Constellations

11:30 am, 1:00 pm, 2:30 pm || MIST B02 (Mitchell Institute)

Show off your physics knowledge and win prizes!

Take the demo quiz, located on the first floor of the Mitchell Building.

All events are sponsored by the Texas A&M University System, the Department of Physics & Astronomy, the George P. and Cynthia Woods Mitchell Institute, the Texas A&M College of Science External Advisory and Development Council, ExxonMobil, Willard and Anne Levin Foundation, and the Department of Aerospace Engineering.

By attending the Texas A&M University Physics & Engineering Festival, you do hereby grant Texas A&M University (TAMU) the right to create and/or utilize photographs or digital, video or audio recordings of yourself and/or your property and to use these for any educational, promotional, news or research materials and/or publications.

Texas A&M University does not assume any supervisory responsibility for minors attending the Festival.

1st Floor, Mitchell Institute (MIST)

- A Century of Particle Detection
- Chaotic Pendulums
- Cornstarch Ion Trap
- Fire Tornado
- Foucault Pendulum
- Lissajous
- Magic Bubbles
- Pendulum Waves
- Resonant Pendulum
- Rubens' Tube
- Screaming Rods
- Skyhooks
- Spectroscopy of Emission Line Tubes
- Van de Graaff Generator
- Vortex Generator (aka Smoke Ring Cannon)
- Walking Rings
- ...and many more!

Gravitational Waves & Laser Demos

107, Laser Room - 1st Floor Mitchell
Physics Building (MPHY)

Texas Sized Tesla Coil

Basement, Mitchell Physics
Building (MPHY)

2nd Floor, Mitchell Physics Building (MPHY)

- Atom Smasher
- Can Crusher
- Cryogenics "Cool Stuff"
- Downhill Race with Cookie Cans
- Eddy Current Pendulum
- Egg Roll
- Electromagnetic Alternator Bike
- Flight Simulators
- Fun with Magnets
- Lenz's Law
- Levitating Train
- Levitron
- Magnetic Accelerator Rifle
- Magdeburg Hemisphere
- Mirages and Light scattering
- Mouse Traps Chain Reaction
- Quadrotors and Helicopters
- Tetrahedron Puzzle Blocks
- The Toy Table for Chemists
- Touchscreen Roomba Control
- Tunes with Wine Glasses
- Virtual Reality
- Wind Tunnel
- ...and many more!

Outdoor Areas

- Atmospheric Pressure
- Balloon Demo (Density Experiment)
- Briefcase Gyroscope
- Catapult
- Constarch Pool
- Coriolis Carousel
- Depth Charge
- Fire Piston
- Floating Head
- Fun with Freezing Carnations, Racquetballs
- Fun with Friction
- Hovercraft
- Human Sundial
- Lazy-susan & Hand Weights
- Making a Comet
- Methane Bubbles
- Metronomes
- Observing Sun Spots with telescope
- Optical Illusions
- Ping Pong Cannon
- Sand Lever
- Segway
- Soapy Bubbles
- Sports Physics
- Square-Wheel Bicycle
- Third-Law Force Pair
- Vacuum Lifter
- Will Solar System Planets Float in a Giant Bathtub?
- Your Weight on Different Planets
- ...and many more!

1st Floor, Mitchell Physics Building (MPHY)

- Attracting Bowling Balls
- Bernoulli Principle with Leaf Blower
- Blue Sky
- Car Race Brachistochrone
- Chicks in Space
- Cloud Formation
- Color Mixing
- Demo Quiz
- Fluorescence
- Galileo Feather and Coin
- Grapes Plasma
- Gravity Well
- Heron's Fountain
- Hologram
- Index Matching Demo
- Infrared Imaging
- Jacob's Ladder
- Jumping Rings
- Laser Audio Transmission
- Laser Show
- LIDAR Demo
- Light Bending Demo
- Make a Quake
- Multiple Reflection Mirrors
- Nitrogen Discharge Laser
- Non-newtonian Fluid
- Paintings of Galaxies
- Plasma Speaker
- Polarization Demo
- Reike Tubes
- Shooting Balloons with a Laser
- Spoke POV
- Top Quark
- ...and many more!