



Physics & Engineering Festival

SATURDAY, APRIL 2, 2022: 11:00 am – 4:00 pm

MAIN EVENTS

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| 11:00 am – 12:00 pm | Public Lecture - “Out of This World Repairs – Servicing the Hubble Space Telescope” by Nancy Currie-Gregg | Mitchell Physics Lecture Halls (MPHY 203- 205) |
| 11:30 am - 2:30 pm | Hands-On Science Demonstrations | Mitchell Physics (MPHY) & Mitchell Institute (MIST) |
| 2:40 pm - 2:50 pm | 5-Barrel Depth Charge Explosion | South Side of Mitchell Physics (MPHY) |
| 3:00 pm - 4:00 pm | Public Lecture - “Dark Energy and the Runaway Universe” by Alex Filippenko | Mitchell Physics Lecture Halls (MPHY 203 -205) |

SPECIAL EVENTS

| | | |
|--------------------------------------|---|---|
| 11:30 am, 12:15 pm, 1:00 pm, 1:45 pm | Low Temperature Extravaganza | Mitchell Physics Building (MPHY 213) |
| 2:15 pm – 2:45 pm | Yell Leaders: Texas A&M's official spirit organization | South Side of Mitchell Physics (MPHY) |
| 9:30 am - 4:00 pm | TAMU Students: Earn MaroonBase Points & Win Cash! | https://maroonbase.tamu.edu |

SCIENCE BOX GIVEAWAY



Enter for a chance to win a surprise bundle of science goodies like a t-shirt, glow-in-the-dark frisbee, diffraction glasses and more delivered to your door!

ENTER GIVEAWAY: [HTTPS://TX.AG/SCIENCEGIVEAWAY](https://tx.ag/sciencegiveaway)



ALL EVENTS ARE SPONSORED BY HALLIBURTON, RALPH AND MARSHA SCHILLING '68, NANCY AND ROBERT L. DUNHAM '63, INNOLIGHT TECHNOLOGY USA INC., COL. HAL SCHADE '67, RAMIRO GALINDO '60, THE COLLEGE OF SCIENCE, THE DEPARTMENT OF PHYSICS & ASTRONOMY, AND THE GEORGE P. AND CYNTHIA WOODS MITCHELL INSTITUTE. PREVIOUS SUPPORTERS THAT MADE THIS EVENT POSSIBLE WERE THE TEXAS A&M UNIVERSITY SYSTEM, CHARLES R. '62 AND JUDITH G. MUNNERLYN, SUSAN SHESKEY, MICHELE MOBLEY '87, AHMED MAHMOUD '87, THE WILLARD AND ANNE LEVIN FOUNDATION, PURNA C. MURTHY, CC CREATIONS, SCHLOTZSKY'S COLLEGE STATION, AND PEPSI.

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

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1st Floor, Mitchell Institute (MIST)

- A Century of Particle Detection
- Chaotic Pendulums
- Cornstarch Ion Trap
- Expanding Universe
- Foucault Pendulum
- Lissajous
- Magic Bubbles
- Pendulum Waves
- Resonant Pendulum
- Rubens' Tube
- Skyhooks
- Solar Power Cars
- Van de Graaff Generator
- Vortex Generator (aka Smoke Ring Cannon)
- Walking Rings
- 3D Constellations
- ...and many more!

Laser Demos

107, 109 Laser Room
1st Floor Mitchell Physics Building

Texas Sized Tesla Coil

Basement, Mitchell Physics
Building (MPHY)

2nd Floor, Mitchell Physics Building (MPHY)

- Atom Smasher
- Cryogenics "Cool Stuff"
- Downhill Race with Cookie Cans
- Eddy Current Pendulum
- Egg Roll
- Electromagnetic Alternator Bike
- HOMER & Tensegrity Robots
- Jumping Rings
- Lenz's Law
- Leaning Tower
- LIDAR
- Make a Quake
- Mirages and Light Scattering
- Mouse Traps Chain Reaction
- Nevermiss Minigolf
- Oscilloscope Music
- Polarization Monitor
- Schlieren Optics
- Sonic Levitator
- The Toy Table for Chemists
- Tunes with Wine Glasses
- ...and many more!

1st Floor, Mitchell Physics Building (MPHY)

- Attracting Bowling Balls
- Bernoulli Principle with Leaf Blower
- Car Race Brachistochrone
- Cross Stitch Constellations
- Doppler Shift With Lightbulbs
- Elipitcal Pool Table
- Falling Up
- Fluorescence
- Gravity Well
- Homopolar Motor
- Heron's Fountain
- Infinity Mirror
- Infrared Imaging
- Invisible Water Balls
- Jacob's Ladder
- Laser Drawing
- Laser Waterfall
- Levitating Train
- Light Bending Demo
- Mini Tesla Coil
- Multiple Reflection Mirros
- Musical Inductors
- Non-Newtonian Fluid
- Pipe Drums
- Rodin's Coil
- Shooting Balloons With a Laser
- Spoke POV
- Tornado
- Ultrasonic Parametric Speaker
- 3D Printed Images
- ...and many more!

Outdoor Areas

- Atmospheric Pressure
- Briefcase Gyroscope
- Catapult
- Constarch Pool
- Coriolis Carousel
- Depth Charge
- Floating Head
- Galilean Cannon
- Fun with Friction
- Lazy-Susan & Hand Weights
- Liquid Sand
- Methane Bubbles
- Optical Illusions
- Ping Pong Cannon
- Potato Physics
- Sand Lever
- Soapy Bubbles
- Sports Physics
- Square-Wheel Bicycle
- Third-Law Force Pair
- Vacuum Lifter
- Your Weight on Different Planets
- ...and many more!

