



TEXAS A&M UNIVERSITY

## Physics & Astronomy



# SMP

## SATURDAY MORNING PHYSICS

19 -YEAR ANNIVERSARY

DISCOVER HOW  
**PHYSICS**  
**HELPS US**  
UNDERSTAND NATURE!

AN EVENT SERIES FOR TEXAS HIGH SCHOOL STUDENTS TO  
LEARN ABOUT THE NEWEST DEVELOPMENTS IN MODERN PHYSICS

*quantum science, high-energy physics, black holes, nuclear physics,  
the broader role of science in society, and much more!\**

**\* WIN PRIZES (AND EARN A CERTIFICATE!)**

ORGANIZERS & CONTACT: Prof. Ralf Rapp (rapp@comp.tamu.edu), Prof. Rainer Fries (rjfries@comp.tamu.edu),  
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**<https://cyclotron.tamu.edu/smp/>**



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## SATURDAY MORNING PHYSICS

### WHY?

Physics is a fundamental science to unravel the laws of nature so that we improve our understanding and appreciation of the world around us, from the smallest to the largest scales. For the 19th year running, you are cordially invited to attend and have fun while finding out how scientists are pushing the frontiers of our knowledge of fundamental particles, the phases of matter, the universe, and applications to address outstanding challenges of our future. Listen to and discuss with world-renowned scientists working at Texas A&M University who have agreed to share their newest insights and knowledge first-hand in an entertaining and understandable way.

### HOW?

The format of each Saturday Morning Physics (SMP) event is as follows:

9:30 Check-In and Registration  
10:00 Presentation  
11:00 Discussion/Q&A

\* **CERTIFICATE & PRIZES:** To be awarded a final "diploma" certificate, you need to complete at least 5 out of 7 events. Because there is a common thread through the event sequence, regular attendance is most beneficial. Prizes are given out at each event (except the first) based on the quizzes of the previous event.

### WHERE?

PRE-REGISTRATION: Please visit <https://cyclotron.tamu.edu/smp/> to register for free. When registering, make sure to take care of the liability waiver and acknowledge your parent's/guardian's consent by checking the appropriate box. Also remember to check back regularly for possible schedule updates or modifications.

LOCATION: Hawking Auditorium, Mitchell Institute for Fundamental Physics and Astronomy, Texas A&M University, College Station, TX 77843-4242  
Tel. 979-845-1411  
(Ask for Ralf Rapp, Rainer Fries or Jeremy Holt)

# PHYSICS: THE SCIENCE OF MATTER AND ENERGY AND THEIR INTERACTIONS

## WHAT & WHEN?

*Join us in 2026 to learn about the following topics:*

- science policy + quantum phenomena
- ghost particles + atomic nuclei
- black holes + quantum gravity
- astrophysics + origin of the elements

Saturday, January 24

Dr. Philip Adsley

*How Scientists Help Policymakers Improve the World*

Saturday, January 31

Dr. Austin Schneider

*Hunting for Ghost Particles*

Saturday, February 7

Dr. Jonas Karthein

*Atoms and Molecules as a Window into the Atomic Nucleus*

Saturday, February 14

Dr. Jonelle Walsh

*Hunting for the Most Massive Black Holes in the Universe*

Saturday, February 21

Dr. Monica Kang

*Does Spacetime Exist? The Puzzle of Quantum Gravity*

Saturday, February 28

Dr. Shenglong Xu

*Into the Quantum Realm: Peculiar but Powerful*

Saturday, March 7

Dr. Carlos Bertulani

*Big Bang, Hydrogen, Helium, and (Almost) Nothing Else*

No prerequisites necessary (except for your curiosity)!