

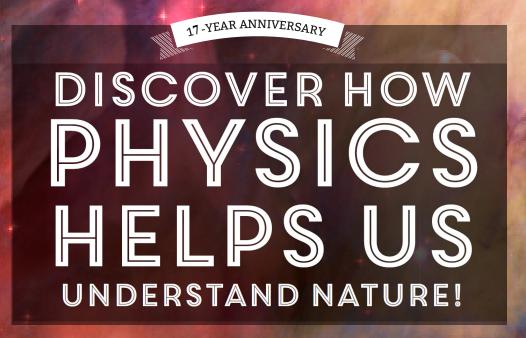
TEXAS A&M UNIVERSITY

Physics & Astronomy



# SMP

SATURDAY MORNING PHYSICS



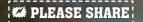
AN EVENT SERIES FOR TEXAS HIGH SCHOOL STUDENTS TO LEARN ABOUT THE NEWEST DEVELOPMENTS IN MODERN PHYSICS

" ultra-dense matter, black holes, lasers in space, quantum dots, computer simulation, string theory, the periodic table and much more!\*

\* WIN PRIZES (AND EARN A CERTIFICATE!)

ORGANIZERS & CONTACT: Prof. Ralf Rapp (rapp@comp.tamu.edu), Prof. Rainer Fries (rifries@comp.tamu.edu),
Prof. Jeremy Holt (holt@comp.tamu.edu), Cyclotron Institute and Department of Physics & Astronomy at Texas A&M University

https://cyclotron.tamu.edu/smp/





Physics & Astronomy

#### SATURDAY MORNING PHYSICS

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

#### 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 17th 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/O&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?

The PRE-REGISTRATION: Please visit https://cyclotron.tamu.edu/smp/.to.rec

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)

## WHAT & WHEN?

Join us in 2024 to learn about the following topics:

- ultra-dense matter + black holes
- lasers in space + quantum dots
- computer simulation + string theory
- particle physics + the periodic table

Saturday, January 27 Professor Jeremy Holt *Ultra-Dense Matter* 

Saturday, February 3
Professor Felipe Guzman
Lasers in Space: Gravitational Astrophysics
and Earth Observations

Saturday, February 10
Professor Krista Smith
Centuries of Gravity: How We Learned
to Read Light and Study Black Holes

Saturday, February 17
Professor Shenglong Xu
Simulating Physics on a Computer:
From Simple Rules to Complex Phenomena

Saturday, February 24
Professor Cody Folden
The Future of the Periodic Table

Saturday, March 2
Professor Ergin Sezgin
What is String Theory?

Saturday, March 9
Professor Dong Hee Son
Quantum Dots:
Nanostructure
Generating Light
and Charges

No prerequisites necessary (except for your curiosity)!