

NSF: PHY-1913286
PHY-0847538
PHY-1652199
PHY-2209335



TEXAS A&M UNIVERSITY

Physics & Astronomy



SMP

SATURDAY MORNING PHYSICS

17-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

*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 (rjfries@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/>

PLEASE SHARE



TEXAS A&M UNIVERSITY

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/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)

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)!

www.facebook.com/tamu.smp

CREDIT: NASA, ESA, AND THE HUBBLE HERITAGE TEAM (STSCI/AURA)