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TEXAS A&M UNIVERSITY



Physics & Astronomy

SMP

SATURDAY MORNING PHYSICS

18-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

*neutron stars, observational cosmology, information-age physics,
dark matter, quantum computing, order in chaos 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/>

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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 18th 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 2025 to learn about the following topics:

- neutrons + quantum computing
- dark matter + cosmic mysteries
- information-age physics + order in chaos
- observational cosmology + neutron stars

Saturday, January 25
Dr. Alexey Belyanin

Physics of the Information Age

Saturday, February 1
Dr. Alan McIntosh

How Neutrons Shape Our Universe and Our Civilization

Saturday, February 8
Dr. Bhaskar Dutta

Dark Matter and the Early Universe: Unraveling Cosmic Mysteries

Saturday, February 15
Dr. Dave Toback

Dark Matter and Quantum Computing

Saturday, February 22
Dr. Kevin Huffenberger

How the James Webb Space Telescope and Other Observations See the Universe

Saturday, March 1
Dr. Shenglong Xu

The Beauty of Chaos: Understanding Order in Disorder

Saturday, March 8
Dr. Konstantin Maslov

Neutron Stars as a Laboratory for Physics

No prerequisites necessary (except for your curiosity)!

www.facebook.com/tamu.smp

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