

Astronomy Open Night, Friday, May 6, 2016

ESS 001; 7:30 P.M.

For more information: <http://www.astro.sunysb.edu/openight/opennite.html>

Michael Zingale

“Why Do Stars Explode?”

Stars can explode in a wide-variety of ways, producing various types of supernovae, X-ray bursts, novae... We'll discuss the sources of energy a star can tap and when in their lifetime they can become explosive. We'll also discuss what remains to be understood about each of these events and how we hope to solve these remaining questions.

Prof. Zingale is an Associate Professor of Astronomy in Stony Brook's department of Physics and Astronomy. He joined the Department in 2006, coming most recently from a postdoctoral position at the University of California at Santa Cruz. His research is in modeling stellar explosions and the basic physics therein, and he is an expert in numerical hydrodynamics.

World of Physics Open Night, Friday, May 13, 2016

ESS 001; 7:30 P.M.

For more information: <http://www.physics.sunysb.edu/Physics/WorldsOfPhysics/2015/>

Matthew Eisaman

“Next-Generation Clean-Energy Technologies Explained”

To meet the goals of the recent Paris Agreement and limit the global temperature increase to 2 degrees Celsius, next-generation clean-energy technologies will need to move from the research and demonstration phase to mainstream deployment. In this talk, Dr. Eisaman will discuss a few examples of such technologies from his research, and explain the basic physics that underlie how these technologies work.

Dr. Matthew Eisaman is a Physicist at Brookhaven National Laboratory and an Assistant Professor at Stony Brook University in the Department of Electrical and Computer Engineering. Dr. Eisaman received his Ph.D. in Physics from Harvard in 2006 and was National Research Council Postdoc at the National Institute of Standards and Technology from 2006 to 2008. Prior to arriving at Stony Brook and Brookhaven, he was an Applied Physicist in the Cleantech Innovation Program at Xerox PARC in Palo Alto, CA from 2008-2011. Dr. Eisaman's research has covered a broad range of clean-energy technologies, including CO₂ capture and photovoltaics. His current research explores the connection between structural variations and performance at the nanoscale within solar cells and uses this understanding to develop scalable nanotechnologies to improve the efficiency and lower the cost of solar cells.

Directions to SUNY Stony Brook and ESS Building

- ⇒ From exit 62 of the Long Island Expressway (LIE, I-495) follow Nicolls Road (Route 97) north for nine miles. Pass the South and Main entrances to the University.
- ⇒ Enter the North entrance which will be on your left.
- ⇒ At the top of the small hill, turn right on Circle Road.
- ⇒ Proceed about 1 mile.
- ⇒ Turn left onto Campus Drive and then immediately turn left again onto John S. Toll Drive.
- ⇒ Proceed about 50 yards then turn right into the large paved parking lot.
- ⇒ The Earth and Space Sciences building is the large concrete building at the northeast end of the parking lot.

Map of campus is on the web at: <http://www.stonybrook.edu/sb/map/>

TEACHER IN SERVICE CREDITS

If your school requires you to have a sequence of educational opportunities in order to receive in-service credit, please advise them that during the Spring 2016 semester we will provide attendance certification for each of the lectures attended.

Please contact the respective department for more information.