

# Department of Physics & Astronomy

#### Weekly Calendar & News

November 27-December 2, 2017

## Departmental Colloquium

The Fluctuation-Dissipation Theorem

George W. Ford

University of Michigan

Host: Jorge Pullin 3:30 PM Thursday, November 30, 2017 109 Nicholson Hall

• Refreshments served at 3:10 PM in 232 (Library) Nicholson Hall •

The equilibrium state of a system is in general a state of rest. However, if one looks under great magnification one sees that there are always spontaneous microscopic fluctuations about this state. These fluctuations are what are also sometimes called noise. The fluctuation-dissipation theorem tells us how to calculate the spectrum of these fluctuation. Most physicists have at least heard of the theorem, but few seem to know exactly what it is or how it is used. My aim will be to do just that; describe what the theorem is and to illustrate how it is to be used.

## **LSU Physics & Astronomy in the News**

Alumni in the news from Business Report: <u>Executive Spotlight Q&A</u>: <u>Leslie Austin</u> (<u>Mock</u>)

#### **Events**

• <u>LSU Science Cafe - Stellar Explosions and Stardust</u>: Register at <a href="http://bit.ly/2jqCAqL Dr.">http://bit.ly/2jqCAqL Dr.</a>
 <u>Catherine Deibel</u> will share the story of the birth of the universe, stellar explosions and how we are all "stardust" in this fascinating talk about our connection to the Cosmos. Doors open at 5 p.m. for free food and networking, and the talk will start at 6 p.m. Remember, people of all ages are welcome, so please spread the word and join us for a fun and informative night!



• Saturday Science, "Bayou Corne: Bubbles and Troubles" by Dr. Carol Wicks of the LSU

Geology and Geophysics Department (see attached flyer below)

When: Saturday, December 2, 2017, 10:00-11:00 AM

Where: Room 130 Nicholson Hall, LSU

• <u>Landolt Observatory Public Observing:</u> Full Moon

When: Saturday, December 2, 2017 7:00 - 8:00 PM Where: Nicholson Hall roof - Landolt Observatory

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## **Bayou Corne: Bubbles and Troubles**

A free public lecture by Dr. Carol M. Wicks





#### About the Lecture

Dr. Carol Wicks is the Frank W. and Patricia Harrison Family Professor, in LSU's School of Geology & Geophysics. Her primary interest is in understanding links between hydrogeology and karst systems. She has dedicated a significant effort in recent work to studying petrophysics and the subsurface geology of Louisiana.

Salt domes — giant deposits of salt left over during the formation of the North American continent, some as large as Mount Everest — lie beneath much of the state of Louisiana. Salt mining has turned many of these domes into caverns, which are sometimes used industrially for storing crude oil. In June 2012, one of these caverns began to collapse under the pressure of the earth above, forming a large sinkhole and prompting an evacuation of 350 residents of Bayou Corne. As of 2016, the sinkhole spans more than 35 acres.

Dr. Wicks will discuss the geology of the salt domes and the human actions that combined to result in the collapse and formation of the Bayou Corne sinkhole.

## 2 December 2017, 10-11:00 a.m.

Room 130 Nicholson Hall, LSU

