

**LSU**College of  
Science  
Department of Physics  
& Astronomy202 Nicholson Hall  
Baton Rouge, LA 70803  
TEL: 225-578-2261  
FAX: 225-578-5855  
<http://www.lsu.edu/physics>

# Weekly Calendar and News

Dec. 12-31, 2016

## LSU Physics & Astronomy in the News

- Jerry Draayer named AAAS Fellow:  
[http://www.lsu.edu/physics/news/2016/12/draayer\\_fellow.php](http://www.lsu.edu/physics/news/2016/12/draayer_fellow.php)
- Gabriela Gonzalez featured in Veja:  
<http://veja.abril.com.br/complemento/entrevista/gabriela-gonzalez.html>
- LSU researchers, students plan solar eclipse balloon launch.  
<http://news.siu.edu/2016/11/112216tjc16065.php>
- Scientist of the Year: Gabriela González. HENAAC Awards keynote presentation:  
<https://www.youtube.com/watch?v=xoqC0xQUSFM>

## Events

- Friday Night Lecture Series: "The Star of Bethlehem"  
<http://www.braastro.org/phpBB3/viewtopic.php?f=24&t=1833>  
Friday, December 9, 2016, 7:30 PM, Highland Road Park Observatory
- LaCNS Seminar: "Neutron Spin Echo: The Technology and the Science" by Dr. Michael Ohl. <http://www.lsu.edu/physics/lacns/events/index.php>  
Monday, December 12, 2016, 3:00 PM, 1008B Digital Media Center
- [College of Science Diploma Ceremony](#)  
Friday, December 16, 2016, 9:00 AM, Maddox Fieldhouse
- Winter Holiday (University offices closed)  
Friday, December 23, 2016 - Monday, January 2, 2017

LSU COLLEGE OF SCIENCE



Fall Diploma  
Ceremony

Friday, December 16 , 9 a.m.  
Maddox Fieldhouse

*View the ceremony live at [science.lsu.edu](http://science.lsu.edu)*



Monday, December 12  
3:00 pm  
1008B Digital Media Center  
Louisiana State University

### Neutron Spin Echo: The Technology and the Science

When Neutrons were used as probes to understand the properties of matter first, it became immediately obvious, inelastic processes could be studied as well. The higher the energy - resolution of Neutron scattering instruments got, the better one could unravel slow dynamics.

Subsequently, Neutron scattering instruments were pushed more and more to higher resolution and more ideas were developed. The principle of Neutron Spin Echo (NSE) to encode and decode the energy transfer of Neutrons in the spin of the scattered Neutrons is well known since 1971.

About 8 years later IN11, the first NSE spectrometer worldwide, at the Institute Laue-Langevin in Grenoble, France was built and went into operation with first results. This was the start of many more NSE spectrometer to come later and up to now NSE spectrometer still possess the highest energy resolution in the field of Neutron scattering. As of today worldwide about 6 NSE spectrometer of the generic IN11 type are operated in Europe and the USA. The newest instrument is the NSE at the Spallation Neutron Source in Oak Ridge, USA. A wide field of scientific questions could be addressed to this new type of instruments. They are mainly in the field of soft matter e.g. polymer main chain and side group motions, glass forming properties, internal dynamics of proteins, functionalities of bacteria to name just a few. In this talk, the latest technology and newest scientific questions shall be addressed.

SEMINAR  
SERIES  
2016



*Guest Speaker*

**Dr.  
Michael  
Ohl**

Lead Instrument  
Scientist, Spallation  
Neutron Source

Oak Ridge National  
Laboratory, TN

Free and open to the public



[www.lsu.edu/physics/lacns](http://www.lsu.edu/physics/lacns)

