



College of  
Science  
Department of Physics  
& Astronomy

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## Weekly Calendar

September 5-9, 2016

### Departmental Colloquium

#### “Stability at Saddles of Potentials”

3:30 PM, Thursday, Sept. 8, 2016

109 Nicholson Hall

**A. R. P. Rau**

Department of Physics & Astronomy, Louisiana State University

**Host: Juhan Frank**

A variety of instances in celestial, classical and quantum mechanics, and electromagnetism involve quasi-stability at saddle points of multi-dimensional surfaces. These include Lagrange Points and Trojan asteroids, Paul traps, highly excited states of atoms in magnetic fields, doubly-excited states of atoms, and transition states controlling chemical transformation. Some unifying themes behind these patterns, especially Coriolis-type couplings in both time-dependent and time-independent phenomena that lead to quasi-stability, will be discussed.

### LSU Physics & Astronomy in the News

- Thomas Kutter and Marin Tzanov were among the international T2K Collaboration who recently announced their findings on the symmetry between neutrino and antineutrino oscillation.  
[http://www.lsu.edu/physics/news/2016/08/news\\_08\\_29\\_Kutter\\_t2k.php](http://www.lsu.edu/physics/news/2016/08/news_08_29_Kutter_t2k.php)
- Joseph Giaime talks to NPR about detecting the biggest wave in the universe.  
<http://www.npr.org/2016/08/17/487923755/how-to-catch-the-biggest-wave-in-the-universe>
- Noelle and the MARSLIFE team, including LSU Physics & Astronomy Professor T. Gregory Guzik and researcher Michael Stewart, collect and characterize microorganisms from the troposphere and the stratosphere, or the almost-space regions at altitudes reaching 30 miles above Earth.  
<http://lsuscienceblog.squarespace.com/blog/2016/8/24/could-earth-bacteria-survive-on-mars-lsu-researcher-noelle-bryan-recovers-bacteria-from-the-stratosphere>

# New Publication

- [Schrödinger-like quantum dynamics in loop quantized black holes](#) - Gambini, Rodolfo, Javier Olmedo, and Jorge Pullin. Int.J.Mod.Phys. D25 (2016) no.08, 1642006 arXiv:1605.00969

# Events

- **Geaux Science BLOCK PARTY**  
When: Thursday, September 8, 2016, 4:30 PM - 6:30 PM  
Where: Tower Drive

## PHYSICS BLOCK PARTY

Friday, 9 September 3:00 PM

2nd Floor Nicholson (halls and rooms near library)

★ **Welcome for new people in Department**

★ **Free pizza and sodas** - Pizza arrives at 3:20

★ **LN<sub>2</sub> Ice Cream Social**

★ **Physics/LSU Three-Strikes-You're-Out**

Starting at 3:45; Everyone plays

Fun LSU-Physics questions, when you rack up three wrong answers, you're out  
Play for fun and honor, plus the winner and two runners-up get neat prizes

★ **Minimum-Acceleration Duels**

Teams-of-two duels and group melee

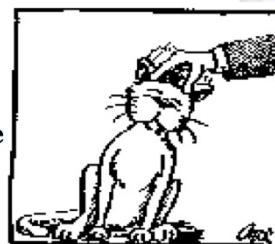
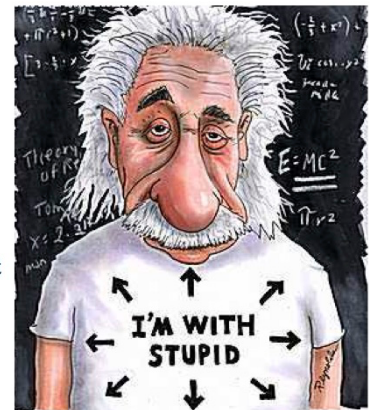
Prize for winning team

★ **Ping Pong Tournament**

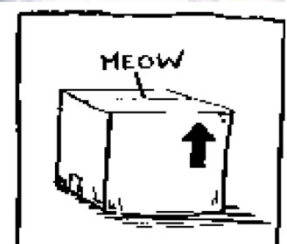
Arrive promptly at 3:00 PM

Tournament Director = Peter Diener & Hwang Lee

★ **Book exchange, Jacob's Ladder...**



Theoretician's Cat



Experimentalist's Cat