



Department of Physics & Astronomy

Weekly Calendar & News March 6-11, 2017 Departmental Colloquium

Emergent Phenomena Induced by Quantum Fluctuation

Wei Ku Shanghai Jiao Tong University, China Host: Rongying Jin

3:30 PM Thursday, March 9 119 Nicholson Hall

Condensed matter systems are most interesting because their rich emergent phenomena that often can go against the simple rules of thumb derived from standard models. In this talk, I will introduce a poor man's illustration of the concept of emergence. As an example, I will discuss our recent study of the rich magnetic and orbital ordering in the Fe-based hightemperature superconductors, and demonstrate a counter-intuitive phenomenon that a larger spin actually fluctuate stronger in the presence of itinerant carriers. This talk will also clarify the relation between the structural (orbital) order and the magnetic order. Finally, we point out an occurrence of correlated metals in such mixed local/non-local systems.

LSU Physics & Astronomy in the News

- BREC's Highland Road Park Observatory is celebrating its 20th anniversary <u>http://www.theadvocate.com/baton_rouge/news/communities/mid_city/article_cf0d2ee6-fabc-11e6-a3be-6b7bb1a0c1f6.html</u>
- We're on the Verge of a Gravitational Wave Astronomy Boom <u>http://www.seeker.com/gravitational-wave-astronomy-poised-for-boom-</u>2288776071.html
- Arnell Nelson featured as Graduate Staff Spotlight in LSU's Graduate School newsletter, Please see the attached PDF

Publication

• Zhaoliang Liao, Rongying Jin, E. W. Plummer, and Jiandi Zhang, "*Delicate Competing Electronic States in Ultrathin Manganite Films*", Phys. Rev. B **95**, 085130 (2017) http://journals.aps.org/prb/abstract/10.1103/PhysRevB.95.085130

Events

- Landolt Observatory Public Viewing Night: Aldebaran disappears at 9:52:01 PM CST When: Saturday, March 4, 9:00-10:00 PM Where: Landolt Astronomical Observatory, roof of Nicholson Hall
- Gabriela Gonzalez & Wayne Newhauser are featured speakers at <u>TEDxLSU 2017</u>: <u>Chain Reaction</u> When: Saturday, March 11, 1:00-6:30 PM Where: LSU Union Theater
- Explore the Physics of Superheroes with Physicist James Kakalios
 When: Saturday, March 11, 11:00 AM
 Where: Nicholson Hall, Room 130

Please see the attached flyers

STAR PARTY SATURDAY: OPEN HOUSE AT OBSERVATORY

SATURDAY: 9:00-10:00 PM [Don't come if sky is mostly cloudy; Rain date on Sunday] Roof of Nicholson Hall



THE MOON WILL PASS IN FRONT OF THE STAR ALDEBARAN (the "Angry Red Eye of Taurus the Bull") at close to 9:52 PM CST





Special Free Lecture The Physics of Superheroes

with physicist James Kakalios



11:00 am, Saturday, March 11th LSU CAMPUS

Nicholson Hall, Room 130

Across from the LSU Student Union

Hosted by The American Physics Society

College of Science Department of Physics & Astronomy

Graduate Staff Spotlight

Arnell Nelson - Department of Physics and Astronomy



1. What brought you to LSU?

Two years after resigning from eight years of service with the Louisiana State Police Training Academy as the Administrative Secretary, I found myself "bored stiff," and I knew I was ready for a new adventure. Several friends with whom I kept in contact were employed here at LSU, so I applied for a position once I decided to return to work. I certainly had a memorable first day/week. My first day was during the week of Hurricane Andrew on August 24, 1992.

2. What is your current involvement with the LSU graduate student community?

I am currently the Administrative Coordinator for the Graduate Office in the Department of Physics and Astronomy. Our enrollment for this semester is 102, and I love the students — most of the time! I am the G-Mama helping them on their journey from the admissions process through receiving their M.S. or doctoral degree. Whatever the students need, I am always here to guide and assist. I do whatever I can administratively. Sometimes that may include a shared cookie, a scolding, a hug, a tear, a prayer — it takes all of that!

3. If you could travel back in time, who would you like to meet and where would you want to go?

I would love to meet my grandfather, Mose H. Lemon. I have only seen a photo, but he looks like a wise, gentle giant! I would also like to sit in at the Apollo Theater during performances by Ella Fitzgerald, Billie Holiday, Duke Ellington, etc. I love real music!

4. What is your favorite book and why?

The Battlefield of the Mind by Joyce Meyer is one of my favorite books. It just keeps me aware of how I view life. "For as he thinks in his heart, so is he..." (Prov. 23:7).

5. Can you think of an event that changed your life in a significant way?

Reaching the 60 Plus Club! Although it seems like it got here too fast, I am excited!