



College of
Science
Department of Physics
& Astronomy

202 Nicholson Hall
Louisiana State University
Baton Rouge, LA 70803
TEL: 225-578-2261
FAX: 225-578-5855
<http://www.phys.lsu.edu>

Weekly Calendar

March 28 – April 1, 2016

Special Seminar

"Sizing Up the Stars"

3:30 PM Tuesday, March 29, 2016

109 Nicholson Hall

Tabetha Boyajian

Yale University

Host: Juhan Frank

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

I will discuss results associated with ongoing surveys to measure diameters and temperatures of main sequence stars with long-baseline optical/infrared interferometry. Such empirical data are used to construct and calibrate less-direct relationships in order to extend our knowledge to a large number of stars. The data are also used to identify weaknesses in stellar atmosphere and evolutionary modeling as well as provide empirical constraints to aid in the development of new models. I will discuss how observed discrepancies with models compared to observations have implications for the precise characterization of exoplanets.

I will also highlight recent results from the Planet Hunters project (www.planethunters.org). Planet Hunters calls on volunteers from the general public to classify data from the Kepler space telescope in the search for transiting exoplanets. The project has also discovered the "most mysterious star in our galaxy."

LSU Physics & Astronomy in the News

Ivan Agullo was awarded the International Society Young Scientist Prize from the International Society on General Relativity and Gravitation. The IUPAP General Relativity and Gravitation Young Scientist award is considered among the highest international recognitions in the field of general relativity and gravitation for young researchers, recognizing outstanding achievements of scientists at early stages of their career. Agullo was acknowledged "for his outstanding contributions to the physics of the early universe and possible observational consequences of quantum gravity." [Read more](#)

Departmental Colloquium

"Confronting Fundamental Challenges Facing Lattice Quantum Chromodynamics"

3:30 PM Thursday, March 31, 2016

109 Nicholson Hal

Michael Endres

MIT

Host: Jerry Draayer/Ed Zganjar

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

The emergence of complex structure from simple origins is a common occurrence in nature. Hadrons and nuclei are one example, arising from the strong interactions of the standard model, with low-energy properties governed by only the QCD scale and light quark masses, to a first approximation. Although simple from the standpoint of their underlying theoretical description, the few- and many-body properties of such strongly interacting systems are immensely rich, and can only be accessed reliably through a nonperturbative treatment of study. Monte Carlo simulations, performed on a Euclidean space-time lattice, provide one of the few known avenues for achieving this aim. However, determining the properties of such systems numerically is often beset by significant obstacles in and of itself. In this talk, I will discuss how novel approaches inspired by physical insights, can overcome a number of these fundamental challenges, and discuss their use in numerical studies of nuclear and particle physics from first principles.

Special Event



#AskGaby

March 29

11:30 a.m. – 12:30 p.m. CST

Physicist, researcher and spokesperson
of LIGO Scientific Collaboration
answering your questions March 29.

**Tweet or message your questions
to @lsu or @lsuresearchnews
with #AskGaby.**

LSU

College of
Science
Department of Physics
& Astronomy