

TEL: 225-578-2261 FAX: 225-578-5855 http://www.phys.lsu.edu 202 NICHOLSON HALL Louisiana State University Baton Rouge, Louisiana 70803-4001

WEEKLY CALENDAR

September 30 - October 4, 2013

DEPARTMENTAL COLLOQUIUM

"Superconductivity and magnetism: enduring frenemies"

3:30 PM October 3, 2013 109 Nicholson Hall

David J. Singh

Oak Ridge National Laboratory

Host: Mark Jarrell

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

The interplay of magnetism and superconductivity is an old story with many twists. The latest of these is the discovery superconductivity in Fe-pnictides and chalcogenides. This talk overviews some of the history of the science around this story and presents a discussion of the physical properties of superconductors near magnetism, especially the Fe-based materials, but also ruthenates and some older materials. Some new directions including suppression of magnetism in favor of spin-fluctuations, Fermi surface topology and magnetic reconstruction of the Fermi surface are presented.

Saturday Science at LSU

September 28, 2013 10:00 A.M. 130 Nicholson Hall, LSU

Ivan Agullo
LSU Dept. of Physics and Astronomy

"The origin of cosmic large scale structure"

PUBLICATIONS:

- 1. "Large Beta-Delayed One and Two Neutron Emission Rates in the Decay of 86Ga," **E.F. Zganjar** with UNIRIB and HRIBF co-authors. Physical Review Letters, **111**, 132502 (2013).
- 2. "Beta-decay study of neutron-rich bromine and krypton isotopes," **E. F. Zganjar** with UNIRIB and HRIBF co-authors, Physical Review C **88**, 014308 (2013).