

## Weekly Calendar

September 21-25, 2015

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

## **Departmental Colloquium**

# "Habitable Zones and the Occurrence of Potential Habitable Planets in our Galaxy"

3:30 PM Thursday, September 24, 2015

109 Nicholson Hall

Ravi Kopparapu

Goddard Space Flight Center

**HOST: Juhan Frank** 

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

Identifying habitable (and possibly inhabited) planets around other stars is one of NASA's greatest long-term goals, and a primary focus of current exoplanet surveys. Specifically, the study of habitable zones (HZs) has received increased attention recently with the discoveries of terrestrial mass/size planets from both ground-based surveys and space-based missions like Kepler. In our Solar system, there are four terrestrial planets (Mercury, Venus, Earth and Mars), but only one of them is inhabited. This arrangement provides an intuitive understanding of HZ around our Sun, but is it representative of other planetary systems? In this talk, I will first discuss our group's contribution to the field of exoplanet habitability and provide estimates of HZs around other stars. We have developed an interactive online HZ calculator to estimate the HZ limits around different stars (http://www3.geosc.psu.edu/~ruk15/planets). Then, I will discuss about the progress made towards the discoveries of rocky planets in the HZs, how common are they in our galaxy, and the implications to future ground and space-based observational efforts whose aim is to detect bio-signatures on potential inhabited extrasolar planets.

# Saturday Science

### AT LOUISIANA STATE UNIVERSITY

## Adventures in Undergraduate Research: From Fire Ants to Foxes



A public lecture by

Dr. Linda Hooper-Bui

LSU School of Environmental

Sciences



26 September 2015, 10-11:15 a.m. Room 130 Nicholson Hall, LSU



Communications & University Relations

#### Media Relations

3960 West Lakeshore Drive Baton Rouge, LA 70808 O: (225) 578-8654 F: (225) 578-3860 www.lsu.edu

### View the Total Lunar Eclipse on Sept. 27

FOR IMMEDIATE RELEASE September 21, 2015

BATON ROUGE – The Landolt Astronomical Observatory on the LSU campus will be open to the public to view the total lunar eclipse on Sept. 27. LSU Department of Physics and Astronomy faculty and students will be on hand for the event and available to answer questions. The observatory will be open from 8:30 p.m. to 11:30 p.m. The public will have a chance to view the lunar eclipse through the observatory's large Alvan Clark Telescope.

Lunar eclipses occur when the sun, Earth and moon align. The Earth blocks the sunlight and casts a shadow on the moon. The moon can appear to have a red glow and therefore is called a "Blood Moon." The next lunar eclipse visible from Baton Rouge will be in three years.

"An astronaut standing on the moon would see our Earth completely covering the sun, with the sun's corona sticking out giving a halo around the Earth. But the brightest light will actually be a brilliant red rim all around the Earth's edge caused by seeing all of the world's sunsets simultaneously," said Professor Bradley Schaefer, LSU Department of Physics & Astronomy.

The Landolt Astronomical Observatory located on the LSU campus is on the roof of Nicholson Hall on Tower Drive by the LSU Student Union. Free parking is available after hours and on the weekends in the parking lot between Nicholson Hall and the Howe-Russell Geoscience Complex. A stairway up to the observatory is located on the first floor of Nicholson Hall. The Landolt Astronomical Observatory was built in the late 1930s. Please note that it is not handicap accessible.

The Landolt Astronomical Observatory is open to the public once a month. The next scheduled viewing will be of Saturn and its rings on Oct. 18 from 7:00 to 8:00 p.m.

Additional Link:

Landolt Astronomical Observatory: http://www.phys.lsu.edu/newwebsite/news/observatory.html

-30-

Contact Alison Satake LSU Media Relations 225-578-3870 asatake@lsu.edu

Mimi LaValle LSU Department of Physics & Astronomy 225-578-2261 mlavall@lsu.edu

More news and information can be found on LSU's media center, www.lsu.edu/mediacenter