Departmental Colloquium

“Quantum correlations and entanglement in the presence of dispersive media”

3:30 PM Thursday, October 22, 2015

109 Nicholson Hall

Ryan Glasser
Tulane University

HOST: Mark Wilde

In this talk I will describe a four-wave mixing process that has been shown to generate strongly nonclassical states of light that find many uses in the field of quantum information. This process also generates large dispersive effects, resulting in extreme manipulations of the group velocity of light. Both slow- and fast-light will be introduced, and I will describe a series of experiments that combine nonclassical states of light and entanglement with dispersive media. The experimental results provide some insight into the role that quantum mechanics may play in enforcing causality.

Special Announcement:

Join us for Physics & Astronomy ALUMNI TAILGATE

Saturday, October 24
Nicholson Hall
3-6 p.m.

Reconnect with fellow alumni and former professors.
Meet current students.
Enjoy jambalaya & science in the Quad.

1. Tour the Landoll Observatory
2. Observe research by students and faculty
3. Interact with astronomy and public outreach from the MARS Truck
4. Enjoy jambalaya and LN₂ ice cream