



# PHYSICS & ASTRONOMY WEEKLY CALENDAR

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Louisiana State University  
Baton Rouge, Louisiana 70803-4001

## *November 5, 2007* Departmental Colloquium

### "Is Spacetime an Emergent Phenomenon?"

3:40 PM - Thursday, November 8, 2007  
109 Nicholson Hall

**Vijay Balasubramanian**  
University of Pennsylvania

*Host - Luis Lehner*

• Refreshments served at 3:15 PM in 229 Nicholson Hall •

I will argue, first in the semiclassical theory of gravity and then in string theory, that space time itself is an emergent phenomenon that arises as a long distance effective description of a more complex underlying system. Many of the arguments will focus on the origin of entropy in gravitating spacetimes.

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## **Material Science and Engineering**

### "Micro-oscillators, Micromagnets, and Magnetic Resonance Force Microscopy"

3:40 PM - Wednesday, November 7, 2007  
109 Nicholson Hall

**John Markert**  
University of Texas

John DiTusa - Host

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