

# Columbia University

## Department of Physics Colloquium



### “**THE HIGGS BOSON: LATEST NEWS FROM THE LARGE HADRON COLLIDER**”

The existence of the Higgs boson is predicted by the Standard Model of particle physics, as a consequence of its explanation of the origin of mass. However, for the past almost 50 years, experimental searches for the Higgs boson have come up empty, and the issue of its existence has emerged as one of the most pressing questions in physics. This past July 4, experiments at the CERN Large Hadron Collider announced the discovery of a new subatomic particle, one which seems to closely resemble predictions for the Higgs boson. This breakthrough will be described, updated with more recent results, and discussed in the context of its implications for the next steps in our quest to understand the fundamental principles underlying the nature of the universe.



Prof. John Parsons,  
Columbia University

**Monday, September 10, 2012  
4:10 PM 428 Pupin Hall**