

# LEPP JOURNAL CLUB

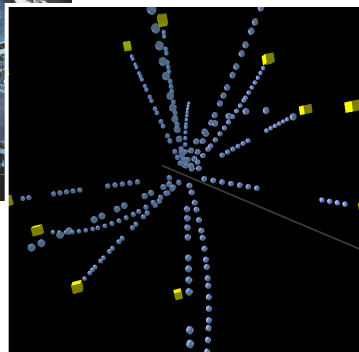
**Matt Bellis**

**Department of Physics and Astronomy,  
Siena College**



## **Searching for Baryon-number Violation in the BaBar Dataset and Elsewhere**

From 1999-2008, the BaBar experiment collected data from electron-positron collisions running at the Upsilon(4S) resonance. This provided analysts with 1 billion B mesons with which to probe a wide variety of physics. This talk will give an overview of a search for baryon number violation in B meson decays using the dataset. This process is a signature of many Grand Unified Theories and would indicate new physics beyond the standard model. The results of this search will be presented and prospects for future analyses at the LHC and elsewhere will be discussed.



**Friday**  
**August 24, 4:00pm**  
301 Physical Sciences Building  
(Refreshments, 3:45pm)



LEPP, the Cornell University Laboratory for Elementary-Particle Physics, has joined with CHESSE to become the Cornell Laboratory for Accelerator-based Sciences and Education (CLASSE). LEPP's primary source of support is the National Science Foundation.

