

**AY 5, Summer Session I, 2008:**  
**Quiz #5a**

Draft: July 22, 2008

1. What is the primary aim of the Large Synoptic Survey Telescope (LSST)? (*i.e.*, How does it differ from other telescopes?)
  
2. Primordial black holes formed differently than “normal” black holes, which formed by the collapse of a star(s). How did primordial black holes form?
  
3. When the Large Hadron Collider (LHC) is activated, physicists will likely observe the “missing links” in the standard model of particle physics. What theory will these predicted observations help? (Hint: consider the four fundamental forces of physics.)
  
4. According to current astronomical models, what is the source of gamma-ray bursts? (*i.e.*, What object or process is observed as a gamma-ray burst?)
  
5. In billions of years, what will the Universe look like? List two aspects that will look different.