

Polkinghorne Questions

Chapter 1

1. Laplace and others claimed "the end of physics" toward the end of the 19th century. It seemed to them that everything was settled. What two issues does Polkinghorne mention that were not settled?
2. Which scientists thought that light was particle-like? Which scientists thought that light was wave-like? When did they think these things?
3. What were some of the first pieces of experimental evidence for Quantum Theory?
4. What is a pyrrhic victory? Why does Polkinghorne refer to Einstein's explanation of the photoelectric effect as a pyrrhic victory?
5. Why did Rutherford and others have trouble accepting the solar system model of an atom?
6. What is Compton scattering? What is its relevance to this chapter?