

Homework #12

1. Is there good reason to believe the Cosmic Censureship Hypothesis? Explain.
2. Explain the difference between an event horizon and a stationary limit.
3. How is Bekenstein's hypothesis that a black hole has an entropy proportional to its surface area supposed to save the 2nd Law of Thermodynamics from potential violations?
4. What is Hawking radiation? How is it supposed to support the claim that the surface gravity of a black hole is proportional to its temperature?