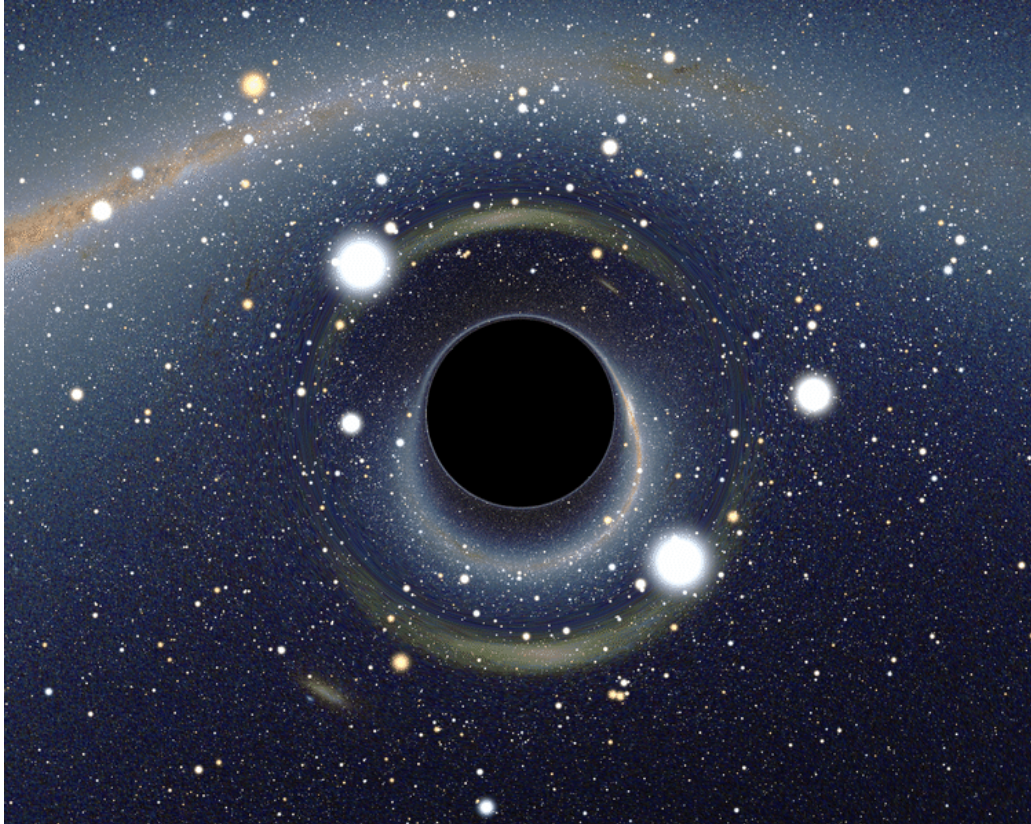


Society of Physics Students Spring  
Seminar Series (SPSSSS)

**PROFESSOR SERA CREMONINI**

**Gravity, Black Holes, and Strings**



In the early 20th century Einstein's theory of relativity drastically changed our understanding of gravity and the fabric of space-time. Despite its great successes, the theory of general relativity is incomplete. It does not take into account quantum mechanics and fails to describe fundamental properties of black holes and the very beginning of the universe. This lecture will introduce the main ingredients of string theory, the most promising framework for a quantum description of gravity, and discuss its consequences for space-time at the smallest scales. We will explore what string theory has taught us about the structure of black holes, the early evolution of the universe and the behavior of gravity.

**LL316 4:10 Tuesday, March 19th**

**Refreshments will be served\***