Society of Physics Students presents
Professor Sera Cremonini
Lehigh University
Black Holes, Strings and Holography

The direct detection of gravitational waves provides yet another remarkable confirmation of Einstein's vision of the universe, in which space and time are interwoven and dynamic. Despite its stark successes, the theory of general relativity is incomplete, in that it fails to describe regions of space-time with very large curvature, and for which quantum mechanical effects cannot be ignored. These include the interior of black holes and the very early universe. String theory offers a concrete framework to probe the quantum nature of gravity, the microscopic properties of black holes and the short-distance behavior of space-time. This lecture will discuss various aspects of string theory and what it has taught us about theories of gravity and their connection to the quantum world.

All are welcome to learn about the mysteries of black holes and string theory!

LL 316 at 4:30 on Monday, Oct. 23rd
Refreshments will be served