

Physics Colloquium
Monday February 20th, 2006
4:15 PM 428 Pupin Hall
Professor Lawrence M. Krauss
Ambrose Swasey Professor of Physics,
Professor of Astronomy, & Chair, Physics Department,
Case Western Reserve University
**“Life, The Universe, and Nothing:
Life and Death in an Ever-Expanding Universe.”**

- In this talk, I will ruminate on the future of the Universe itself, and also on the future of life within it, using as my starting point recent revolutionary observations in cosmology. I will first discuss why the Universe we appear to inhabit is the worst of all possible universes, as far as considerations of the quality and quantity of life is concerned. Then, I will describe how fundamental aspects of the way in which we teach cosmology, in particular the relation between geometry and destiny, have been altered by the recognition that the cosmological constant may not be zero. Finally, I will address the fascinating question of whether life might be eternal in an eternally expanding universe. The answer to this question appears to hinge on issues of basic physics, in particular on issues of quantum mechanics and computation, which may determine whether life is ultimately analogue or digital.



Host: Professor Greene