

TOPICS & SPEAKERS

The Nature of Space and Time

Professor Gary T. Horowitz

University of California, Santa Barbara

Gary T. Horowitz is a Professor of Physics at University of California, Santa Barbara. He received his Ph.D. from University of Chicago and continued on his postdoctoral research at UCSB and mathematical Institute at Oxford. He was a member of the Institute for Advanced study at Princeton before joining the faculty at UCSB.

Professor Horowitz is a leading expert on gravitational physics. His research is mostly focused on questions involving gravity under the most extreme conditions. These include the big bang in cosmology and the spacetime inside black holes. His research also involves gravitational aspects of string theory including black holes in higher dimensions, quantum properties of black holes, and especially quantum descriptions of singularities.

His honors include Fellow of the American Physical Society, Alfred P. Sloan Fellow, Albert Einstein Fellow, First Prize in Gravity Research Foundation contest (shared with R. Myers), and the Xanthopoulos Prize (an international prize in general relativity).

Finding a Home in the Multiverse

Professor Anthony Aguirre

University of California, Santa Cruz

Anthony Aguirre is a professor of physics at University of California, Santa Cruz. He received his Ph.D. from Harvard University and spent three years as a member of astrophysics group at the Institute for Advanced Study in Princeton.

Professor Aguirre has worked in a wide variety of topics in theoretical cosmology, ranging from intergalactic dust to galaxy formation to gravity physics to the large-scale structure of inflationary universes and the arrow of time.

Extra Dimensions

Professor John Terning

University of California, Davis

John Terning is a Professor of Physics at University of California, Davis. He received his Ph.D. from University of Toronto and was a Postdoctoral Fellow at Yale University. He was also a researcher at Boston University, University of California, Berkeley and Harvard University.

Professor Terning was a staff member at the Los Alamos National Laboratory. John Terning's research interests include theoretical particle physics, electroweak symmetry breaking, supersymmetry, cosmology, and extra dimensions.

SYMPOSIUM AT A GLANCE

12:00 pm – 12:45 pm	Registration
1:00 pm – 2:00 pm	The Nature of Space and Time Gary T. Horowitz
2:00 pm – 2:15 pm	Break
2:15 pm – 3:15 pm	Finding a Home in the Multiverse Anthony Aguirre
3:15 pm – 3:30 pm	Break
3:30 pm – 4:30 pm	Extra Dimensions John Terning
4:30 pm – 5:00 pm	Q & A

Find Answers to These Questions in The Symposium

- (Does *TIME* have a beginning?
- (Does *TIME* have an end?
- (Can you make *TIME* go faster or slower?
- (Is *TIME TRAVEL* possible?
- (What are the *EXTRA DIMENSIONS*?
- (Can we observe the *EXTRA DIMENSIONS* experimentally?
- (How many *DIMENSIONS* are there?
- (Are there any other *UNIVERSES* in addition to ours?
- (Are other *UNIVERSES* observable?
- (How do we describe a *MULTIVERSE* (multiple number of universes) and what is its structure?
- (Are *MULTIVERSE* theories testable, and how can they be tested if we only observe one universe?