

A "Big Read" for Fall 2011

"Einstein's Telescope: The Hunt for Dark Matter and Dark Energy in the Universe"

by Dr. Evalyn Gates, Executive Director and CEO of the Cleveland Museum of Natural History

University Circle UMC is exploring a series of exciting programs that will give us an opportunity to think about reason, faith, science and the heavens. Next in our series, and our "Big Read" choice for October, is "Einstein's Telescope." (Advanced science degrees are not required for participation!)

"Einstein's Telescope" describes a radical new technique known as gravitational lensing that allows scientists to use space itself as a telescope. The warps and dimples in Einstein's audacious description of space and time act as giant "cosmic lenses" that allow us to see the invisible. Using Einstein's Telescope, we can:

- Find planets around other stars
- Magnify distant galaxies into view
- Map out dark matter that winds throughout the Universe
- Trace the imprint of dark energy on our expanding and evolving cosmos

Using Einstein's telescope, we may finally be able to answer the ancient question: What is the Universe made of? The answer will almost certainly lead us to the next great revolution in our understanding of the universe.

Dr. Evalyn Gates will join us on Wednesday evening, November 2



Meet the Author

Dr. Evalyn Gates, Executive Director and CEO of the Cleveland Museum of Natural History, joins our Wednesday Renewal, November 2 from 5:30 to 7:30pm, to discuss her book, "Einstein's Telescope: The Hunt for Dark Matter and Dark Energy in the Universe." Dr. Gates is passionate about science and has a gift for making complex information and ideas accessible. All are invited to join us for a fascinating evening about the future of the Universe! (You do not have to read the book to participate in this program.)

Dr. Gates received her Ph.D. in theoretical physics from Case Western Reserve University in 1990. Her research focuses on various aspects of cosmology (the study of the origin, growth and fate of the Universe) and astrophysics (the branch of astronomy that studies the origin, composition and interaction of objects in outer space). Most recently she has been searching for ancient stellar fossils in the form of the oldest white dwarfs. Dr. Gates has a strong interest in addressing the under-representation of women and minorities in the physical sciences and has written several articles on the topic of women in physics. She is committed to inviting individuals of all ages and backgrounds to explore the ideas and discoveries of current scientific research.