

The **Lois McGlothlin Donaldson**  
Endowed Lecture in Physics

# What is the *Universe* Made Of?



**Dr. Robert Scherrer**  
Cosmologist, Vanderbilt University  
Nashville, Tennessee

**April 6, 2018**

**6:30 PM Reception**  
**7 PM Lecture**  
**University Center Theater**

*Free and open to the public*  
*Convenient Parking in the*  
*Zach Curlin parking garage*



Department of Physics  
and Materials Science

**Dr. Robert Scherrer** is a cosmologist, specializing in the physics of dark matter and dark energy. After earning his A.B. degree in physics at Princeton University and spending two years at Cambridge University on a Marshall Scholarship, Dr. Scherrer earned his Ph.D. in physics from the University of Chicago in 1987. He was a postdoctoral research fellow at the Harvard-Smithsonian Center for Astrophysics before joining the faculty at Ohio State University in 1989. He came to Vanderbilt in 2003 to serve as Chair of the Department of Physics and Astronomy.

In his talk, Dr. Scherrer will share that the Universe is "weirder than we could possibly have imagined. The observational evidence points to a universe that is roughly five percent ordinary matter, 25 percent dark matter, and 70 percent dark energy." He will discuss the evidence for dark matter and dark energy, the properties of each, and ongoing searches to discover the particle comprising the dark matter and to pin down the exact nature of dark energy.

Dr. Scherrer is the author of more than 100 peer-reviewed journal articles as well as several popular science articles and a number of science-fiction short stories. He was a 1999 winner of the Ohio State Alumni Award for Distinguished Teaching, and he received the 2010 Klopsteg Memorial Award of the American Association of Physics Teachers for "outstanding communication of the excitement of contemporary physics to the general public."

**Lois McGlothlin Donaldson** was fascinated with how the physical universe functions and came to believe that mankind's advancement as a species and perhaps even our future existence might well depend on those who could develop novel ways to utilize and perhaps reinterpret the physical laws that had so captured her imagination. This memorial endowed lecture is part of her legacy. Learn more at [memphis.edu/physics](http://memphis.edu/physics)