



Silicon Valley Astronomy Lecture Series

Wednesday, May 20, 2009 @ 7:00 pm

The Dark Side of the Universe: Dark Matter & Dark Energy

As part of the 10th annual Silicon Valley Astronomy Lecture Series, Stanford University's Dr. Patricia Burchat, (http://www.stanford.edu/dept/physics/people/faculty/burchat_patricia.html) will discuss *The Dark Side of the Universe: Dark Matter & Dark Energy*, an illustrated, non-technical lecture, Wednesday, May 20, at 7 p.m. in the Smithwick Theatre at Foothill College in Los Altos Hills. This talk is part of the local events celebrating the International Year of Astronomy in 2009, <http://www.astronomy2009.org/>. Admission is free and the public is invited. Seating is on a first-come, first-served basis. Arrive early to locate parking.

A scientific revolution in our understanding of the universe is under way. In the last decade or so, astronomers have been forced to accept two mysterious observations. About a quarter of the universe is made of "dark matter", which attracts things with its gravity, but is otherwise invisible. And roughly two-thirds of the universe is composed of "dark energy", which causes space itself to expand at an ever-increasing rate. That means only a small fraction of the universe is made of ordinary matter—the stuff we understand!

In this non-technical presentation, Dr. Burchat will explore the evidence for the dark side of the cosmos, and the experiments that are being developed to investigate dark matter and energy further.

Dr. Burchat is chairwoman of the Stanford University Physics Department (<http://www.stanford.edu/dept/physics/index.shtml>). She studies matter and antimatter created at the Stanford Linear Accelerator Center (<http://www.slac.stanford.edu/>), and the bending of light by the gravity of massive clusters of galaxies. She was granted a Guggenheim Fellowship in 2005 and was appointed as a Bass University Fellow in Undergraduate Education in 2004. In 2007, she was named the recipient of the Walter J. Gores Award for Excellence in Teaching (http://registrar.stanford.edu/shared/univ_awards.htm?id=3#gores).

The free lecture series is sponsored by the Foothill College Astronomy Program, NASA Ames Research Center, SETI Institute and Astronomical Society of the Pacific. Past lectures from the series are available online in MP3-format.

Foothill College is located on El Monte Road in Los Altos Hills off Interstate 280. Visitors must purchase a campus parking permit for \$2. Parking lots 1, 7 and 8 provide stair and no-stair access to the theatre. For more information, access www.foothill.edu or call (650) 949-7888.

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Meet at San Antonio and El Camino at 5:45 for dinner at the Pasta Market or 6:30 for carpooling, Wed. Mar 4. The lecture is at 7:00. For more information visit <http://paloaltocatholic.org/aofa.html>, or contact Carrie, ckamos@yahoo.com, or Randy, 408.739.2881, age-of-aquinas@paloaltocatholic.org.