



California Academy of Sciences Spring 2009 Benjamin Dean Astronomy Lecture Series

The Benjamin Dean Lectures return to Morrison Planetarium for the series' 20th anniversary featuring Fellows of the California Academy of Sciences.

Monday, January 12

Dark Energy and the Runaway Universe

Alex Filippenko, University of California, Berkeley

Observations of very distant exploding stars (supernovae) show that the expansion of the Universe is now speeding up, rather than slowing down as expected. Other, completely independent data strongly support this amazing conclusion. Over the largest distances, our Universe seems to be dominated by a repulsive "dark energy," stretching the very fabric of space faster and faster with time. The physical nature of dark energy is often considered to be the most important unsolved problem in physics, and it will probably provide clues to a unified quantum theory of gravity.

Monday, February 23

Asteroids, Evolution, and the Long-term Habitability of Earth

David Morrison, NASA Ames Research Center

Cosmic impacts are now recognized as a major factor in the biological history of the Earth. Most dramatic was the discovery that a cosmic impact caused the mass extinction 65 million years ago at the end of the Cretaceous. Now that scientists recognize the importance of impacts, they can consider ways to protect the planet from future cosmic disasters. Scientists are studying technologies that could deflect impactors before they hit. For the first time in history, humans have the capacity to predict, and perhaps avoid entirely, the sort of catastrophe that wiped out the dinosaurs.

Monday, March 16

Iconic Images from the Hubble Space Telescope: Their Meaning for Astronomy and for Humanity

Sandra Faber, University of California, Santa Cruz

Dr. Faber will tour the Universe with the most beautiful and notable images from the Hubble Space Telescope. She will use these as a springboard to discuss the impact that modern astronomical images have had on the thinking about the history, role, and future of the human species in the Universe.

Monday, April 6

Habitable Worlds in the Universe: The Search Begins

Geoff Marcy, University of California, Berkeley

Science fiction assumes that the Milky Way Galaxy abounds with habitable planets populated by advanced civilizations engaged in interstellar commerce and conflict. Back in the real Universe, Earth-like planets and alien life have proved elusive. Has science fiction led us astray? In 2009, astronomers will launch the first searches for Earth-like worlds around other stars, using bizarre, extreme telescopes for the task. These telescopes fundamentally supersede Galileo's historic little scope for the first time. A wild race for signs of inhabited worlds and extraterrestrial life is about to begin.

Monday, May 4

Are We Alone? We Don't Know, But We're Trying to Find Out

Jill Tarter, Center for SETI Research, SETI Institute

Throughout recorded history, humans have looked at the sky and wondered whether life exists elsewhere. Today, new observational tools allow humans to conduct experiments that shed light on the problem. This lecture summarizes the scientific exploration for extraterrestrial intelligence, and highlights the newest telescopes that may provide an answer.

Monday, June 1

The New Mars: Habitability of a Neighbor World

David Des Marais, NASA Ames Research Center

Of all the other planets in the solar system, Mars is the one whose past climate most closely resembled Earth's. Recent missions have revealed richly fascinating landscapes and deeply important discoveries on Mars. The red planet might have supported life sometime in the past, and perhaps supports life even today.

Location: Morrison Planetarium, California Academy of Sciences, 55 Music Concourse Drive, Golden Gate Park, San Francisco

Time: All programs begin at 7:30 PM.

Tickets: Purchase tickets in advance by calling 415.379.8000. Seating is limited and tickets are first-come, first-served. Box office opens 30 minutes before the lecture.

Price: \$5 Academy members, \$8 Seniors, \$10 Adults
Please bring your membership card for Academy discount.

Questions: Email deanseries@calacademy.org or call 415.379.8000. For parking and transportation information, visit www.calacademy.org/visit/getting_here. For information on future Dean lectures, please join the Academy's email list by contacting deanseries@calacademy.org.

The Alexander F. Morrison Planetarium

Utilizing high-resolution, full-dome video capabilities under its 75-foot, 290-seat dome, the Planetarium creates an unprecedented immersive experience for its visitors, illustrating Earth's place in the Universe as never before and leading audiences on virtual journeys through the solar system, among the stars, and beyond the galaxy.

About the California Academy of Sciences

The California Academy of Sciences is the only place in the world to combine a natural history museum, aquarium, planetarium, and world-class research facility under one roof. General admission is Monday - Saturday 9:30 AM - 5:00 PM, and Sunday 11:00 AM - 5:00 PM.