

BIANCHI PLANETARIUM SCHEDULE AUG-SEP-OCT 2009

DURING FIRST HALF OF FALL 2009 SEMESTER PLANETARIUM PROGRAMS WILL BE GIVEN EVERY OTHER FRIDAY NIGHT AT 7:30pm and 8:30pm STARTING AUG-28.

WEATHER PERMITTING TELESCOPE VIEWING OF CELESTIAL OBJECTS USING CSUN'S CAMPUS OBSERVATORY WILL FOLLOW EACH PROGRAM.

Aug-28 7:30pm Summer Sky Show.

Come and see and learn about stars and constellations and planets visible in the sky during the summer of this year.

8:30pm The Voyager Encounters.

Voyager 1 and Voyager 2 spacecraft were launched in August of 1977 and their primary missions were to collect data and to take images of the four largest planets of our solar system and their moons. After successfully accomplishing that part of their missions and after traveling for over 30 years away from the Sun in different direction, both Voyagers have recently reached the region in space at the edge of our solar system where the solar wind (a stream of charged particles escaping from the Sun) runs up against the thin gas that's between the stars. This boundary is about 100 times farther from the Sun than the Earth and it is called termination shock. Tonight's slide program, with recorded narration by Patrick Stewart, summarizes and highlights results obtained by both Voyagers during their visits of the four largest planets in our solar system.

Sep-11 7:30pm Summer Sky Show.

Come and see and learn about stars and constellations and planets visible in the sky during the late summer of this year.

8:30pm Big Bang Nucleosynthesis: Telescopes in Search of New Physics

The last decade has seen a revolution in cosmology, leaving us with one well determined model for the recent history of universe. We found that that 96% of the energy in the universe today is of unknown origin. Some 23% is clumped like ordinary matter, but is invisible. 72% is smoothly distributed and makes space accelerate. Ordinary atoms are only 4%. This new cosmology allows us to calculate the amount of light nuclei made in the first 3 minutes in the Big Bang Nucleosynthesis. Observations of heavy hydrogen agree with the predictions, validating the physics used to make the prediction. But many observations of helium and all of lithium do not agree. Can this be an early hint of still more mysteries to come? This special talk will be presented by Dr. David Tytler, a professor of Astronomy at UC San Diego

Sep-25 7:30pm Autumn Sky Show.

Come and see and learn about stars and constellations and planets visible in the sky during early autumn of this year.

8:30pm Hubble Vision: A fascinating tour of the cosmos - from Earth's orbit.

Since its launch in 1990, the Hubble Space Telescope has provided incredible images of unprecedented details to astronomers, and made an astonishing array of discoveries – from nearby objects in our solar system to the most distant galaxies at limits of the observable universe. In this all-new production, major themes in current astronomy are presented. We catch glimpses of solar system objects, including the Moon and Venus, clouds on dusty Mars, a comet's crash into Jupiter, storms on Saturn, Uranus and Neptune, and the faraway worlds of Pluto and Quaoar. Beyond our solar system we explore proto-planetary disks in Orion and other regions of star births across the cosmos; we also view the deaths of stars like our Sun and the cataclysmic aftermath of a supernova explosion. Finally we observe colliding galaxies, jets of particles shooting from active galactic nuclei powered by supermassive black holes, the effects of gravitational lenses, and deep-field views of the most distant galaxies ever seen.

Oct-09 7:30pm Autumn Sky Show.

Come and see and learn about stars and constellations and planets visible in the sky during the autumn of this year.

8:30pm Magellan: Report from Venus.

These days planet Venus appears as a "morning planet" just before sunrise due east as the very brightest object in our sky, except the Sun and the Moon. The planet is considered to be a "sister planet" to our Earth. Of all the planets in our solar system Venus is most like Earth in size and mass, and it also comes closer to Earth than any of the other planets. But until recently not much was known about conditions on Venus because Venus's dense and extensive clouds keep us from seeing its surface directly. This narrated slide program recaps the accomplishments of the Magellan Mission to Venus and takes audience on a "grand" tour of our "sister planet". The program follows Magellan's progress from its launch through the most significant discoveries which made this mission so far one of the most successful missions ever sent to explore the two inner planets of our solar system.

For show information: call 818-677- 5601, or go to:

www.csun.edu/phys/announcements_and_planetarium/planetarium.html

For ticket information: call 818-677-2488

Tickets: general admission - \$5 for one show, \$8 for two shows

student admission - \$3 for one show, \$5 for two shows