

UC SANTA BARBARA

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## **NASA'S "CHANDRA" NAMED BY UCSB LECTURER; LAUNCH SCHEDULED JUST AFTER MIDNIGHT**

Jatila van der Veen, of the University of California, Santa Barbara's Department of Physics and co-winner of NASA's international contest responsible for naming the new x-ray observatory "Chandra," will be watching the launch just after midnight tonight at the Kennedy Space Center in Florida.

Van der Veen is a lecturer and academic coordinator in UCSB's Department of Physics. The former Camarillo, Calif. high school teacher spent the last ten summers and semester breaks developing high school physics curricula at UCSB.

The co-winners were chosen from 6,000 entries from 50 states and 61 countries by a panel including prominent scientists, a space science executive and nationally recognized science reporters.

The Chandra X-ray Observatory will help astronomers understand the structure and evolution of the universe by studying powerful sources of X-rays such as exploding stars, matter falling into black holes and other exotic celestial objects. More than 45 feet long and weighing over five tons, it will be one of the largest objects ever placed in Earth orbit by the space shuttle.

"Chandra" is short for Chandrasekhar, which means moon or luminous in Sanskrit, and was the name of the late Indian-American Nobel laureate Subrahmanyan Chandrasekhar. Widely regarded as one of the foremost astrophysicists of the 20th Century, Chandrasekhar won the Nobel Prize in 1983 for his theoretical studies of physical processes important to the structure and evolution of stars.

In her contest entry van der Veen said, "I propose the name of Subrahmanyan Chandrasekhar, who is famous for the Chandrasekhar Limit of 1.4 solar masses as the greatest mass possible for a white dwarf star. He was a courageous pioneer in astrophysics, and passed away just a few years ago. . . Chandra is depicted in the hand gestures of Bharata Natyam, the classical dance of South India, as a crescent moon, and is also used to indicate the passage of time as shown by the changing phases of the moon. I think this connotation, as well as being part of the name of a very prominent astrophysicist whose research on high energy astrophysical phenomena was crucial to our understanding of neutron stars and black holes, makes Chandra an appropriate name for the AXAF satellite."

According to NASA press materials, van der Veen realized that Chandra's pioneering work on the structure and evolution of stars was central to the kind of observations that NASA's premier X-ray telescope would be making. Also, she appreciated the literal translation of his name since she had spent a year in India studying dance, a life-long interest, thanks to a grant from the Indian government and the Smithsonian Institution.

For winning NASA's naming contest, van der Veen received the trip to the Kennedy Space Center to view the launch of the Chandra X-ray Observatory. The expenses are donated by TRW, the company that designed and built the satellite.

Jatila van der Veen earned a master's degree in geophysics from Lamont-Doherty Earth Observatory, Columbia University. She is nationally recognized in the field of education for her innovative ideas in teaching high school physics and astronomy. She started the astronomy program at the high school in Camarillo, Calif., where she taught.

The July 22 launch is also considered historic because in addition to deploying the world's most powerful x-ray telescope, it features the first female shuttle commander.

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## **About UC Santa Barbara**

The University of California, Santa Barbara is a leading research institution that also provides a comprehensive liberal arts learning experience. Our academic community of faculty, students, and staff is characterized by a culture of interdisciplinary collaboration that is responsive to the needs of our multicultural and global society. All of this takes place within a living and learning environment like no other, as we draw inspiration from the beauty and resources of our extraordinary location at the edge of the Pacific Ocean.