

UC San Diego Astrophysicist Wins Shaw Prize in Astronomy

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Frank Shu

An astrophysicist at the University of California, San Diego whose wide-ranging research advanced our understanding of how stars, spiral galaxies and planetary systems form has been awarded the \$1-million Shaw Prize in Astronomy.

Frank H. Shu, a professor of physics UC San Diego, will receive the award "in recognition of his outstanding lifetime contributions in theoretical astronomy" by the Shaw Prize Foundation in Hong Kong, which announced the award today. The prize will be formally presented to him at a ceremony on October 7.

The foundation's award, which includes a medal of the philanthropist Sir Run Run Shaw, is annually bestowed on individuals who have made "distinguished and significant" achievements in three categories: astronomy, life science and medicine, and the mathematical sciences. First awarded in 2004, it is sometimes referred to as the "Nobel Prize of the East."

"This award is a significant honor for both Frank Shu and UC San Diego," said Chancellor Marye Anne Fox. "It's a validation of the tremendous impact that Frank has had on advancing the field of astronomy."

"Frank has long been one of my scientific heroes," said Mark Thiemens, Dean of UC San Diego's Division of Physical Sciences. "This prize is one more validation of how significant his influence has been to astronomy, astrophysics and cosmochemistry."

Just last month Shu was honored by the Astronomical Society of the Pacific, which announced that he had won its 2009 Catherine Wolfe Bruce Gold Medal for a lifetime of achievement in astronomy.

Shu's work on the origins of stars over a span of 30 years generated a comprehensive and widely accepted theory that explains the main events in the birth and evolution of a star from the collapse of a cloud of molecules, to the accretion of a magnetized disk of material from which planets form to the appearance of jets and other outflows from a star system.

The theory Shu and his students developed also predicted that comets, once thought to form from pristine materials in the coldest regions of interplanetary space, would contain bits of rock highly transformed by heat. Their unconventional view, put forth in 1996, was confirmed a decade later with the return of dust samples from Comet Wild.

Shu received a bachelor's degree in physics from the Massachusetts Institute of Technology in 1963 and a PhD in astronomy from Harvard University in 1968. He has served on the faculties of the State University of New York at Stony Brook and UC Berkeley. From 2002 to 2006, Shu served as president of National Tsing Hua University of Taiwan. He joined the faculty at UC San Diego as a distinguished professor of physics in 2006

and also holds the title of University Professor, a UC system-wide honor reserved for scholars of international distinction who are recognized as teachers of exceptional ability.

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