

UC SANTA BARBARA

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## **UC Santa Barbara Astrophysicist Lars Bildsten Appointed to Endowed Chair at the Kavli Institute for Theoretical Physics**

UC Santa Barbara astrophysicist Lars Bildsten, a permanent member of the Kavli Institute for Theoretical Physics, has been awarded the Wayne Rosing, Simon and Diana Raab Chair in Theoretical Astrophysics in recognition of his pioneering contributions to the discipline.

The endowed chair was established recently with a combined \$1 million gift from the donors.

As a result, The Kavli Foundation expanded its endowment support for the world-renowned physics research center with a \$1 million matching contribution.

UCSB Chancellor Henry T. Yang expressed his sincere gratitude to the benefactors for their extraordinary commitment to the future of scientific excellence.

"The Wayne Rosing, Simon and Diana Raab Chair will advance research and discovery at the endless frontier of theoretical astrophysics, continuously and richly expanding our understanding of the universe," said Yang. "Once again, UC Santa Barbara Foundation Trustee Fred Kavli has demonstrated his overwhelming

generosity by providing permanent resources for world-leading scientific and educational programming at the institute that is named in his honor."

Nobel Prize winner David Gross, director of the KITP, said, "This marvelous gift from our friends in the community is greatly appreciated. Together with the matching funds from The Kavli Foundation, it will help us advance the growth of theoretical astrophysics at the institute.

I am especially pleased that the first occupant of this endowed chair is to be Lars Bildsten, not just because of his path-breaking research and eminence in the field of astrophysics, but also because of the essential leadership he has provided at the KITP and at UCSB."

Bildsten, who specializes in stellar astrophysics, joined the UC Santa Barbara faculty in 1999, where he is also a professor of physics.

He holds a doctorate in theoretical physics from Cornell University.

Previously, he was a member of both the physics and astronomy departments at UC Berkeley and the Lee A. DuBridge Research Fellow in Theoretical Astrophysics at Caltech.

Among his prestigious awards is the Helen B. Warner Prize from the American Astronomical Society for fundamental work on stellar structure, including nuclear burning on neutron stars, the role of neutron stars as gravity wave sources, and the theory of lithium depletion.

Bildsten said he was humbled and deeply grateful to Wayne Rosing, Simon and Diana Raab, and to UCSB for the honor.

"This endowed chair will allow me to rapidly engage in new opportunities as they arise in astrophysics, education, and outreach," he said.

"It is a privilege to have the flexibility to start scientific endeavors in advance of where a field is moving and use the new ideas to bring people together."

His research is presently focused on understanding the many ways in which stars die and how they manifest themselves to observers.

This includes the theoretical study of many different physical phenomena, such as thermonuclear instabilities, propagating combustion fronts, detonations, and stellar oscillations.

Also of keen interest are the transient astronomical events that appear suddenly in the sky when these explosions occur in distant galaxies.

Many of these transient events will soon be monitored by the Santa Barbara-based Las Cumbres Observatory Global Telescope Network (LCOGT), which is affiliated with the UCSB Physics Department.

Endowed chairs are highly prized academic positions that enable a university to attract and retain distinguished scholars and to develop more fully a field of study by providing ongoing financial support for enhanced research and instruction.

Simon Raab, who served as a member of the KITP's Director's Council, said, "Astrophysics, astronomy, and space exploration have always been, for me, the ultimate expressions of man's search for his place in the universe.

Additionally, they have provided an essential opportunity for the human race to develop the deep humility and perspective that it so sorely needs.

It is an honor to contribute to the science and help the KITP support and sustain Lars and his work."

The Raabs have also funded prizes for a popular and important KITP program that brings high school educators from around the country to UCSB each year to interact with renowned scientists on the most exciting and current areas of modern physics research.

The award-winning classroom science presentations produced by outstanding teachers are made available for use by educators everywhere.

Simon Raab is chair and founder of Faro Technologies, Inc., a leader in the production of high precision portable 3-D measurement instruments.

His wife, Diana Raab, is a celebrated author.

Rosing, a pioneer in computer engineering, is a senior fellow in both astrophysics and engineering at UCSB. His generous support, through the auspices of the

TABASGO Foundation, also includes postdoctoral fellowship prizes in astrophysics and support for the campus's Arts & Lectures program.

He is chief engineer and founder of the LCOGT. The Byrne Observatory at the UC Sedgwick Reserve in the Santa Ynez Valley is part of the growing LCOGT network that is particularly interested in astronomical events that appear suddenly and without warning.

Rosing is also a senior fellow at UC Davis.

The KITP hosts the world's leading physicists who come to Santa Barbara for special conferences and other programs dedicated to exploring some of the most challenging scientific questions of our time.

Thus far, Fred Kavli, through The Kavli Foundation and the Kavli Operating Institute, has provided philanthropic support for the KITP totaling more than \$9 million.

Kavli and The Kavli Foundation will continue to provide matching philanthropic support to increase the endowment for the research center.

More information about the Kavli Institute for Theoretical Physics is available at <http://www.kitp.ucsb.edu>.

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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.