

New physics theory prize names first recipient

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Pioneering theorist and Nobel laureate Philip W. Anderson has been named the first recipient of the Richard E. Prange Prize and Lectureship in Condensed Matter Theory and Related Areas. Anderson will receive a \$10,000 honorarium and deliver a public presentation at the University of Maryland, College Park on Oct. 20, 2009.

The annual award, newly established by the UMD Department of Physics and Condensed Matter Theory Center (CMTC), honors the late Professor Richard Prange, whose distinguished career at Maryland spanned four decades (1961-2000). The Prange <u>Prize</u> is made possible by a gift from Dr. Prange's wife, Dr. Madeleine Joullié of the University of Pennsylvania.

Anderson, currently Joseph Henry Professor of Physics at Princeton University, made indispensable contributions to what is known about the behavior of charges in different sorts of "solid state" systems such as those employed in transistors and other electronic devices. He was awarded the Nobel Prize in 1977 for "fundamental theoretical investigations of the electronic structure of magnetic and disordered systems." In 1982 he received the National Medal of Science from President Ronald Reagan for "fundamental and comprehensive contributions to the theoretical understanding of condensed matter."

Anderson's lecture, titled "Presenting Unpopular Theories," will be delivered at the University of Maryland's John Toll Physics Building at 4:00 p.m. EDT on Tuesday, Oct. 20 in the Physics Lecture Hall, Room



1412. The event is open to the public.

Dr. Richard Prange did his graduate studies at the University of Chicago, where he worked with Nobelist Yoichiro Nambu, among others. Prange was the editor of a widely known book on the quantum Hall effect, but his interests reached well beyond condensed matter, extending into every substantive aspect of theoretical physics including seminal work on quantum chaos. He was at complete ease discussing subjects as disparate as ferromagnetism and the cosmological constant. His interests also included history and travel.

At the University of Maryland, he played a vital role in the life of the Physics Department, leading a substantial reform of its undergraduate major program and serving as chair of crucial departmental committees.

"Richard enjoyed a fascinating and fulfilling career at the University of Maryland exploring condensed matter physics, and even after retirement was active in the department," said Dr. Joullié. "He spent the very last afternoon of his life in the lecture hall for a colloquium on graphene, followed by a vigorous discussion. And so I am happy to institute the Prange Prize, which will certainly generate its own robust discussions in condensed matter theory. Phillip Anderson is the ideal inaugural honoree."

Dr. Prange was a member of the Maryland condensed matter theory group for more than 40 years and was an affiliate of CMTC since its inception in 2002.

"The Prange Prize provides a unique opportunity to acknowledge transformative work in condensed-matter theory, a field that has proven to be an inexhaustible source of insights and discoveries in both fundamental and applied physics, said Dr. Sankar Das Sarma, a UMD Distinguished University Professor and director of the CMTC. "Much of



that progress was made possible by the pioneering science of Philip Anderson, who had a profound influence on subjects ranging from the electronic structure of disordered materials to superconductivity and elementary particle physics."

<u>More information:</u> Condensed Matter Theory Center: <u>physics</u> .umd.edu/cmtc/" target="_blank">www.<u>physics</u>.umd.edu/cmtc/

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