

2011

Martin Bojowald, associate professor of physics received the Physical Sciences Medal. A theoretical physicist who works at the interface of quantum physics and cosmology, Professor Bojowald is recognized for a series of papers in which he described how quantum corrections of Einstein's theory of general relativity can resolve the big bang singularity in cosmology. "In doing so," one nominator said, "he created the burgeoning field of loop quantum cosmology, about which nearly a thousand scientific papers have been published." His pioneering research has been widely recognized. In 2007, he shared the Xanthopoulos Prize, awarded every three years to the top young researcher in gravitational physics, and in 2008 won a career Award from the National Science Foundation.

Patrick G. Cheney, distinguished professor of English and comparative, received the Arts and Humanities Medal. Considered the foremost authority on the early English canon and English Renaissance studies, Professor Cheney is internationally recognized for his groundbreaking transformation of the field of authorship studies. He is the author of five books, the most recent being *Shakespeare's Literary Authorship and Marlowe's Republican Authorship*, with a sixth, *Reading Sixteenth Century Poetry*, to be published on April 15. "Cheney's work on Marlowe, Shakespeare, and Spenser," a colleague said, "has been original in Renaissance Studies because (oddly enough) no one has ever specialized in the three authors who form the basis of the early modern English canon."

Stephen Blair Hedges, professor of biology, received the Life and Health Sciences Medal. A member of the Penn State Biology Department faculty since 1992, Professor Hedges has become an international leader in the field of evolutionary biology and is considered a 21st century Charles Darwin. One aspect of his research has been devoted to accurately dating key nodes on the tree of life in order to relate this radiation to specific events in the earth's history. His research has inspired new hypotheses on the origins of species, including mammals, and formed the basis for his book, *The Timetree of Life*, which some external reviewers said won him "critical acclaim." Author of more than 200 journal articles, he was elected in 2009 as a fellow of the American Association for the Advancement of Science.

Vijay Krishna, distinguished professor of economics, received the Social and Behavioral Sciences Medal. Professor Krishna is recognized for his "stellar publication record" in the top economic journals in the areas of game theory and auctions. His 2002 book, *Auction Theory*, serves as a watershed in synthesizing economic research on auctions. The book is, according to external reviewers, required reading in graduate courses across the country. A member of the Department of Economics faculty since 1993, Professor Krishna has received four multi-year National Science Foundation grants in his career, and is a fellow of the Econometric Society, the foremost international scholarly organization in economics. He earned B.A. and M.A. degrees at Delhi University and a Ph.D. degree at Princeton University.

Chunshan Song, distinguished professor of fuel science and chemical engineering, received the Engineering Medal. Regarded as an international leader in fuel science and catalysis, Professor Song is recognized for new approaches for removing sulfur by selective adsorption for ultra-clean liquid fuels, new approaches for designing sulfur and carbon resistant catalysts, and use of Co₂ in flue gas as a method to produce industrially useful syngas. His contributions were described as "brilliant and prolific" by one of his external references. A member of the University faculty since 1989, he is director of the College of Earth and Mineral

Sciences Energy Institute and is associate director of the Penn State Institutes of Energy and the Environment. He is a fellow of the American Chemical Society and received its Henry Storch Award in Fuel Science in 2010.