Michael Freedman named to Charles Lee Powell Endowed Chair in Mathematics

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Michael Freedman has been selected by Chancellor Richard C. Atkinson to fill the Charles Lee Powell Endowed Chair in Mathematics at the University of California, San Diego.

Freedman, 34, is a professor of mathematics at UCSD whose major research interest is in the field of topology, a branch of mathematics that involves the study of shapes. His current work is centered on the global structure of four-dimensional spaces.

"Michael Freedman's career here at UCSD has been marked by a succession of notable research achievements, the most remarkable being his solution of the Poincare conjecture," said Atkinson. "These achievements have placed him in the first rank among mathematicians and have caused many of the finest mathematics departments in the country to attempt to recruit him from UCSD.

"The generosity of the Powell Foundation in endowing the professorship enables us to recognize Michael Freedman's stature and accomplishments in a concrete way," Atkinson added. "I look forward to his enjoying a long and brilliant tenure as the Powell Professor of Mathematics."

The chair was created by a $250,000 endowment from the Charles Lee Powell Foundation, established in 1954 by Powell, a well-known Southern California engineer, for furtherance of education in the engineering and scientific fields.

The Powell Chair is one of 19 endowed chairs currently funded at UCSD.

"This is obviously a great honor. I am particularly pleased because I see this as an expression of confidence in me by the university," Freedman said. "This is a long term commitment by the university. For my part of the bargain I see it as my responsibility to continue the development of mathematics at UCSD to the best of my ability. The chair will help me support graduate students who are working in my field, and will enable me to bring in distinguished visitors to the department."

Three years ago Freedman achieved international recognition among his colleagues by solving an 82-year-old mathematical problem known as the four-dimensional Poincare conjecture. The hypothesis, named after the famed French mathematician Henri Poincare, is one of a handful of intellectual puzzles which had baffled mathematicians for decades.

Freedman's work could eventually affect our understanding of the universe since most models of the universe are based on four dimensional manifolds.

In recognition of his achievements, Freedman was named a 1984 winner of a $176,000 prize by the John D. and Catherine T. MacArthur Foundation. The tax-free award, which goes each year to "a small number of exceptionally talented individuals," has allowed him to begin pursuing new avenues in his research.

Also in 1984, Freedman was named "California Scientist of the Year" by the California Museum of Science and Industry in Los Angeles, and was elected to membership in the National Academy of Sciences.

Freedman, a resident of La Jolla, earned his Ph.D. in mathematics from Princeton University in 1973 and joined the UCSD Department of Mathematics in 1976.

Although Freedman's work in the field of topology is quite complex and difficult for the non-mathematically inclined to understand, in a sense what he is trying to do is find order in chaos.

"An interesting question emerges from the fact that sometimes a beautiful, symmetrical situation arrives in a disguise." Freedman said. "It's as if you are looking at a honeycomb in a beehive, but through warped glasses; the way you don't perceive its regularity. It's really regular, but you're viewing it through a distorted medium."

The Powell Foundation has also been a major contributor toward construction of the Structural Testing Laboratory at UCSD which bears Powell's name.

Powell, known for construction of Angels Flight railroad and the Third Street Tunnel, both in Los Angeles, died in 1959 at the age of 96.

(December 10, 1985) For more information contact: Paul Lowenberg, 452-3120