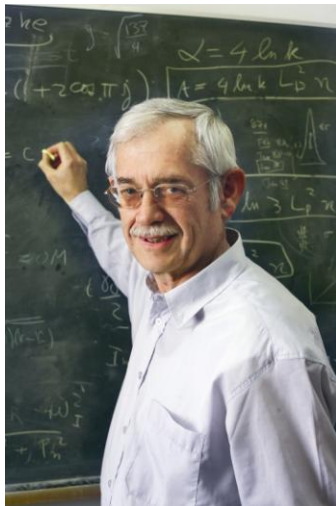


Prof. Jacob Bekenstein, a Black Hole Pioneer and Hebrew University Theoretical Physicist, Has Died

Prof. Jacob Bekenstein, a theoretical physicist at the Hebrew University of Jerusalem whose groundbreaking ideas shed new light on black holes, died unexpectedly in Finland on Sunday, August 16.

Prof. Bekenstein was the Polak Professor of Theoretical Physics at the Hebrew University of Jerusalem's Racah Institute of Physics. His proposals about black holes, entropy and thermodynamics launched the field of black hole thermodynamics and became the basis for the science of Quantum Gravity.



Bekenstein's early ideas were initially contested by the physicist Stephen Hawking, who later reversed course and affirmed them with his famous proposal for the existence of Hawking radiation.

In 2004 Bekenstein's TeVeS theory reconciled Modified Newtonian Dynamics (MOND), which explained a range of cosmological phenomena which had previously required invoking dark matter, with Einstein's theory of gravity.

Born in Mexico City in 1947, Bekenstein became a US citizen in 1968, obtaining his undergraduate and MSc degrees from the Polytechnic Institute of Brooklyn (now the Polytechnic Institute of New York University) in 1969, and his PhD from Princeton University in 1972. In

1974 he moved to Israel, and since 1990 he was a professor at the Hebrew University of Jerusalem, where he continued his research.

Prof. Bekenstein was awarded the Landau Prize in 1981, the Rothschild Prize in 1988, the Israel Prize in physics in 2005, the Weizmann Prize in 2011, the Wolf Prize in 2012, and the American Physical Society's Einstein Prize in 2015.

In 2012, the world's top theoretical physicists gathered to mark 40 years since the publication of Bekenstein's groundbreaking paper on black hole entropy, at an international conference organized by the Hebrew University and the Israel Institute for Advanced Studies. Presented in cooperation with the Israel Science Foundation, the conference focused on recent ramifications of black hole thermodynamics and prospects for the future.

The Hebrew University's president, Prof. Menahem Ben-Sasson, said: "Prof. Bekenstein's original and innovative work has earned him a place of honor in the field of exploration of the universe, and has paved the way for many other scientists around the world."

The Hebrew University of Jerusalem is Israel's leading academic and research institution, producing one-third of all civilian research in Israel. For more about the Hebrew University, see <http://new.huji.ac.il/en>.

Media contact:

Dov Smith

The Hebrew University of Jerusalem

+972-2-5882844 / +972-54-8820860

dovs@savion.huji.ac.il