

Prof. Eli Waxman

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Born in Petach Tikva, Israel, Prof. Eli Waxman earned a BSc in mathematics and physics (1986), and an MSc in physics (1989), both *summa cum laude*, and a PhD degree in physics (1994) all from the Hebrew University of Jerusalem. As he studied toward his graduate degrees, he also worked as a Research Physicist in Israel's Negev Nuclear Research Center. From 1994-1998, he served as a member of the Institute for Advanced Study (Princeton, New Jersey). In 1998, he joined the staff of the Weizmann Institute of Science. He served as the head of the particle physics and astrophysics department during 2009-2012, and as the chief scientist of the Israeli Atomic Energy Commission (on leave from the WIS) during 2013-2015. Today he serves as Director of the Benozziyo Center for Astrophysics, as Director of the Schwartz/Reisman Institute for Theoretical Physics and as Chairman of the board of the Pazy Research Foundation.

The research interests of Prof. Waxman are neutrino, high-energy, and relativistic-astrophysics. With U.S. colleagues, he proposed a theory for the origin of the highest energy particles known in the Universe (a hundred million times more energetic than the particles produced in the LHC at CERN). To test this theory, a large, giga-ton, neutrino detector has been constructed and is being operated at the South Pole. Its results appear to support the theory. He has initiated and is leading a scientific satellite mission, ULTRASAT, which will help us answer some of the big questions in astrophysics, including how supermassive black holes rule their neighborhoods, how stars explode, and where the heavy elements in the Universe, from Iron to Gold and beyond, are produced. ULTRASAT will put Israel – and Israeli scientists and engineers – at the forefront of a global movement to explore the Universe with small, affordable satellites.

Prof. Waxman is married to Vered, a social worker and psychotherapist, and is father to Chen (1990) and Iddo (1991).