

Bio-sketch for Michael S. Turner



Michael S. Turner is a theoretical astrophysicist and the Bruce V. and Diana M. Rauner Distinguished Service Professor at the University of Chicago. He received his B.S. from Caltech, his M.S. and Ph.D. from Stanford (all in physics) and an honorary D.Sc. from Michigan State University. Turner helped to pioneer the interdisciplinary field of particle astrophysics and cosmology, and led the National Academy study *Quarks to the Cosmos* that laid out the strategic vision for the field, including NASA and DOE's Joint Dark Energy Mission (JDEM) which is now in its final planning stages. Turner's scholarly contributions include predicting cosmic acceleration and coining the term dark energy, showing how quantum fluctuations evolved into the seed perturbations for galaxies during cosmic inflation, and several key ideas that led to the cold dark matter theory of structure formation. His honors include the Warner Prize of the American Astronomical Society, the Lilienfeld Prize of the American Physical Society (APS) and the Klopsted Award of the American Association of Physics Teachers. Turner's twenty-plus former Ph.D. students hold faculty positions at leading universities around the country (e.g., Chicago, Caltech and University of Michigan), at national laboratories (Fermilab, JPL, and Argonne) and on Wall Street. He has served as Chief Scientist at Argonne National Laboratory (2006 to 2008), Assistant Director for the Mathematical and Physical Sciences at the National Science Foundation (2003 to 2006), Chair of the Department of Astronomy and Astrophysics (1997 to 2003) and President of the Aspen Center for Physics (1989 to 1994). Turner's current national service includes membership on the NRC's Astronomy Decadal Survey (Astro2010), Board on Physics and Astronomy, and Committee on the Rationale and Goals of the Civil Space Program; Chair of the Physics Section of the National Academy of Sciences and Chair of the APS's Division of Astrophysics; and membership on the NASA Advisory Committee (NAC) and on the Senior Editorial Board of *Science* Magazine. Turner also serves as a Director of the Fermi Research Alliance, a member of the Governing Board of the National Academy of Sciences (NAS Council), and as an Honorary Trustee of the Aspen Center for Physics.