

陳丕燊博士 (Pisin Chen, Ph. D.) 簡介



Professor, Department of Physics and Graduate
Institute of Astrophysics, National Taiwan University
CC Leung Chair Professor of Cosmology, National
Taiwan University

Director, Leung Center for Cosmology and Particle
Astrophysics, NTU

Permanent Member, Kavli Institute for Particle
Astrophysics and Cosmology, Stanford University

■ Education Background:

- Ph.D. in Physics, UCLA, 1984 (in Theoretical Particle Physics under J. J. Sakurai)
- Bachelor of Science in Physics, National Taiwan University (1972)

■ Awards and Honors:

- J. J. Sakurai Memorial Fellowship Awardee (1983)
- Fellow of American Physical Society (1994)
- 4th Prize in Gravity Research Foundation Essay Competition Awards (1995)
- 3rd Prize in Gravity Research Foundation Essay Competition Awards (2001)
- C.C. Leung University Chair Professor of Cosmology, NTU (since 2008)
- NTU Outstanding Research Award (2007)
- Taiwan Outstanding Scholar Foundation “Y.T. Lee Chair Professor” (2007)
- Ministry of Education Distinguished Professorship (the Carry-On Position), Taiwan, R.O.C. (2006)
- Recognition by ROC Ministry of Foreign Affairs Nongovernment Organization (NGO) for Outstanding Scientific Accomplishment at South Pole (2012)

■ Experience:

- Spokesperson of SLAC E-150 “Plasma Lens Experiment” that proved the predictions of the plasma self-focusing effect of high energy electron and positron beams (2000); Selected by Physics Today as one of Top 50 Physics News in 2000
- Spokesperson (together with Prof. Pierre Sokolsky of U. Utah) of the FLASH (Fluorescence in Air from Shower) Collaboration (2002-2007)
- PI of the Taiwan team and Co-PI of the International ANITA (Antarctic Impulsive Transient Antennas) Collaboration (2007-)
- Initiation and International Co-Spokesperson of ARA (Askaryan Radio Array) Observatory Collaboration (2009-)
- PI of the Taiwan team and Co-I of the International UFFO (Ultra Fast Flash Observatory) Collaboration (2009-)
- Vice Chairman of Department of Physics, National Taiwan University (2009-2012)
- First person from Taiwan and in ROC’s 100-year history to have stepped foot on South Pole, Dec. 2011, to oversee the deployment of the first ARA station.
- Group Leader, Stanford Linear Accelerator Center (2000-2007)

■ Professional Services:

- Chairman of int. conference series “Quantum Aspects of Beam Physics” (1998-).

- Executive Committee Member, Division of Beam Physics, American Physical Society (1995-1998).
- Int. Coordinating Committee Member, Marcel Grossmann Meeting series (2002-).
- Executive Committee Member, Asia-Pacific Organization for Cosmology and Particle Astrophysics (APCosPA) (2009-).
- Executive Council Member (1996-2004) and Interdisciplinary Division Coordinator (2004-2008), Overseas Chinese Physics Association (OCPA).
- Scientific Advisory Committee Member, International Center for Zeta-Exawatt Science and Technology (IZEST), Paris, France (2008-)
- Founding Member of the Geneva-based World Education Council, since 2010, which aims at promoting education in developing countries in the world.
- Managing Editor, International Journal of Modern Physics D on Gravitation, Astrophysics, and Cosmology (2014-)

■ **Research Interests:**

- Theoretical cosmology, including the nature of dark matter and dark energy, inflation and cosmic evolution in early universe
- Classical and quantum gravity, including black hole information loss and remnants, gauge theory of gravity, quantization of space-time, etc.
- Theoretical particle astrophysics, such as ultra high energy cosmic rays (UHECR) and cosmic neutrinos
- Experimental investigation of particle astrophysics including ultra high energy cosmic neutrinos and gamma ray bursts
- Laser Cosmology: application of ultra-intense lasers to investigate critical issues in cosmology, classical and quantum gravity, and particle astrophysics