Stanford



Hirohisa A. Tanaka

Professor of Particle Physics and Astrophysics

Bio

BIO

Academic Appointments:

- # Professor, SLAC, Stanford University, 2018
- # Associate Professor/Professor University of Toronto, Department of Physics, 2015-2018
- # Research Scientist/Principal Research Scientist, Institute of Particle Physics, 2007-2018
- # Assistant/Associate Professor, University of British Columbia, 2007-2015
- # Research Associate/Scholar, Princeton University, Department of Physics, 2003-2007

Other current roles:

- # Technical Coordinator, DUNE Near Detector
- # Co-convener: DUNE Near Detector Design Group
- # Member, DUNE Co-spokesperson Election Committee

ACADEMIC APPOINTMENTS

• Professor, Particle Physics and Astrophysics

ADMINISTRATIVE APPOINTMENTS

• Director of Research, Fundamental Physics Directorate, (2018- present)

HONORS AND AWARDS

- Co-recipient, Breakthrough Prize in Fundamental Physics (2015)
- Invitation Fellow, Japan Society for the Promotion of Science (2009)
- Fellow, American Physical Society (2015)

BOARDS, ADVISORY COMMITTEES, PROFESSIONAL ORGANIZATIONS

- Member, LHC Experiments Committee, CERN (2023 present)
- Member, Chair (2019-2023), Physics Advisory Committee, Fermilab (2014 2023)
- Member, Review Panel for Department of High Energy Physics, Tata Institute of Fundamental Research (2019 2019)
- Member, International Advisory Committee, International Conference on Neutrino Physics and Astrophysics (2016 present)
- Member, Experimental Advisory Committee, SNOLAB (2009 2012)
- Member, Panel on Long Baseline Neutrino Experiments and Neutrino Factories, International Committee for Future Accelerators (2013 2017)

- Member, Five Year Plan Steering Committee, TRIUMF (2012 2013)
- Member, Long Range Planning Task Force, Institute of Particle Physics (2015 2015)
- Member, Planning and Policy Advisory Committee. Chair, Accelerator Subcommittee, TRIUMF (2017 present)

PROFESSIONAL EDUCATION

- PhD, Stanford University, Physics (2002)
- AB, Harvard University, Physics and Mathematics (1997)

LINKS

• SLAC Neutrino Group: https://web.slac.stanford.edu/neutrino/

Research & Scholarship

CURRENT RESEARCH AND SCHOLARLY INTERESTS

Particle physics and astrophysics, neutrino properties, dark matter

Teaching

COURSES

2021-22

• Introduction to Particle Physics I: PHYSICS 152, PHYSICS 252 (Spr)

2020-21

- Harmony and the Universe: PHYSICS 96N (Sum)
- Introduction to Particle Physics I: PHYSICS 152, PHYSICS 252 (Spr)

STANFORD ADVISEES

Postdoctoral Faculty Sponsor

Yifan Chen

Doctoral Dissertation Advisor (AC)

Zach Hulcher, Dae Heun Koh, Miriam Moore

Publications

PUBLICATIONS

Neutrino Oscillation Experiments

Tanaka, H. A., IOP IOP PUBLISHING LTD.2020

• The Physics of the B Factories EUROPEAN PHYSICAL JOURNAL C

Bevan, A. J., Golob, B., Mannel, T., Prell, S., Yabsley, B. D., Abe, K., Aihara, H., Anulli, F., Arnaud, N., Aushev, T., Beneke, M., Beringer, J., Bianchi, et al 2014; 74 (11): I-898