

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-convenor: 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