

Biographical Sketch – Tao Han

Professional Preparation

Nankai University	Theoretical Physics	M.S.	1983
University of Wisconsin, Madison	Physics	Ph.D.	1990
Fermi National Accelerator Lab	Theoretical Physics	Post Doc	1990-93

Appointments

Director, PITT PACC	University of Pittsburgh	2011-present
Distinguished Professor	University of Pittsburgh	2014-present
Professor	University of Pittsburgh	2011-2014
Co-Director, Phenomenology Inst.	University of Wisconsin-Madison	2006-2011
Professor	University of Wisconsin-Madison	2001-2011
Associate Professor	University of Wisconsin-Madison	1997-2001
Associate Professor II	University of California-Davis	1997
Assistant Professor	University of California-Davis	1993-1997

Awards and Honors

National Superconducting Super-Collider Fellowship	1991-92
H.I. Romnes Faculty Fellowship, UW-Madison	2001-06
Hilldale Undergraduate/Faculty Research Award, UW-Madison	2001
Elected APS Fellow, American Physical Society	2003
Fermilab Frontier Fellowship	2004
Elected member of CTEQ Collaboration	2012-present
Elected general member of Aspen Center for Physics	2016-present
Elected to APS April Meeting Chair line: Chair 2020	2018-2021
Elected to APS DPF Chair line: Chair-elect 2020; Chair 2021	2019-2022
Elected AAAS Fellow, American Association for the Advancement of Science	2019

Synergistic Activities

- Editorial Board: Physical Review D, 2008-2010; J. Physics G, 2010-2013; EPL, Co-Editor, 2012-2015.
- HEPAP member 2013-2015, University-based theorist; 2021 DPF Ex Officio
- Lecture series at international schools: TASI-04; Univ. of Bonn, Germany, 2005; CERN LHC Olympics 2006; Asian School of Particle, String, Cosmology, Japan 2006; National School of LHC Physics, Israel 2006; BUSSTEPP, Liverpool U 2009 & Swansea U 2010; German Physical Society School on LHC, 2012; KIAS Lectures, Korea 2013; TASI-14 on Higgs physics; SLAC Summer Institute, 2015 & 2019; iSTEP-China, 2016 & 2017; 5th Chilean School of HEP, 2018; Mainz Summer School, 2018; KIT on BMS, 2019.
- TASI Scientific Advisory Board 2010-2016.
- DOE Committee of Visitors (for OHEP), 2016.
- HEPAP Portfolio review subpanel member 2017-2018.
- APS April Meeting Chair line: Vice Chair 2018; Chair Elect 2019; Chair 2020; Past Chair 2021.
- KEK Scientific Advisory Committee 2019-2021.
- IPPP Steering Committee, Durham, UK, 2020-2022.
- Co-organizer, CTEQ Summer Schools, 1999-present.
- Chair, Organizing Committee, Phenomenology Symposia, 1998-present.

Collaborators & Other Affiliations

(i) Recent collaborators in the past 5 years: Andre de Gouvea, Bhaskar Dutta, Bhupal Dev, Ben Machman; Lian-Tao Wang, Shufang Su, Nima Arkani-Hamed, M. Mangano, L. Carpenter, Ian Lewis, T. Plehn, Ahmed Ismail, Zhen Liu, Dorival Goncalves, Danny Marfatia, Ian Low

(ii) Supervision of graduate students: Recent Ph.D. graduate students:

Name	Degree	Year	Current Post	Current Institution
Xing Wang	PhD.	2019	Postdoc	UC- San Diego
Jummou Chen	PhD.	2017	Assistant Prof	Southern China Univ.
Zhuoni Qian	PhD.	2017	Postdoc	DESY, Germany

Zhen Liu	PhD.	2015	Assistant Prof	Univ. of Minnesota
Richard Ruiz	PhD.	2015	Postdoc	Catholic Univ. Louvain
Ian Lewis	PhD.	2011	Assistant Prof	University of Kansas
Kai Wang	PhD.	2008	Professor	Zhejiang U., China

(iii) Supervision of postdoctoral fellows: Recent postdoctoral fellows:

Name	Position	Years	Current Post	Current Institution
Keping Xie	Postdoc	2019-	Postdoc	University of Pittsburgh
Cedric Weiland	Postdoc	2018-	Postdoc	University of Pittsburgh

Selected publications in Refereed Journals:

1. Some New Aspects of Supersymmetry R-Parity-Violating Interactions (V. Barger, G. Giudice and T. Han), Phys. Rev. D40 (1989) 2987.
2. Strong W-W Scattering Signals at pp Supercollider (V. Barger, K. Cheung, T. Han, and R.J.N. Phillips), Phys. Rev. D42 (1990) 3052.
3. Intermediate Mass Higgs Boson at Hadron Colliders (V. Barger, G. Bhattacharya, T. Han, and B.A.Kniehl), Phys. Rev. D43 (1991) 779.
4. On Kaluza-Klein States from Large Extra Dimension (T. Han, J. Lykken and R.J. Zhang), Phys. Rev. D59, 105006 (1999).
5. Signatures for Majorana Neutrinos at Hadron Colliders (T. Han and B. Zhang), Phys. Rev. Lett. 97, 171804 (2006).
6. Neutrino Masses and the CERN LHC: Testing Type II Seesaw (P. Fileviez Perez, T. Han, G.-Y. Huang, T. Li, and K. Wang), Phys. Rev. D78, 015018 (2008).
7. The “Top Priority” at the LHC (T. Han), Int. J. Mod. Phys. A23, 4107 (2008)
8. The Search for Heavy Majorana Neutrinos (A. Atre, T. Han, S. Pascoli, and B. Zhang), JHEP 0905:030 (2009).
9. MSSM Higgs Bosons at the LHC (N. Christenen, T. Han, S. Su), Phys. Rev. D85 (2012) 115018.
10. Physics Opportunities of a 100 TeV Proton-Proton Collider (N. Arkani-Hamed, T. Han, M. Mangano, and L.-T. Wang), Phys. Rept. 652 (2016) 1-49.
11. Electroweak Splitting Functions and High Energy Showering (J. Chen, T. Han, and B. Tweedie), JHEP 1711 (2017) 093.
12. Off-shell Higgs Probe to Naturalness (Dorival Goncalves, Tao Han, Satya Mukhopadhyay), Phys. Rev. Lett. 120 (2018) no.11, 111801.
13. Lepton Number Violation: Seesaw Models and Their Collider Tests (Yi Cai, Tao Han, Tong Li, Richard Ruiz) Front.in Phys. 6 (2018) 40.
14. Nonstandard Neutrino Interactions at COHERENT, DUNE, T2HK and LHC (Tao Han, Jiaojun Liao, Hongkai Liu, Danny Marfatia), JHEP 1911 (2019) 028.
15. The Search for Electroweakinos (Anadi Canepa, Tao Han, Xing Wang), Ann. Rev. Nucl Part, Vol 70, p. 425 (2020).
16. High Energy Leptonic Collisions and Electroweak Parton Distribution Functions (Tao Han, Yang Ma, Keping Xie) e-Print: 2007.14300.
17. WIMPs at High Energy Muon Colliders (Tao Han, Zhen Liu, Lian-Tao Wang, Xing Wang) e-Print: 2009.11287.