CUMULATIVE BIO-BIBLIOGRAPHY

University of California, Santa Cruz, CA
February 9, 2026
Howard E. Haber
Distinguished Professor
Physics Department
Stevenson College

The signature below indicates that the following information is believed to be accurate and the bio-bibliographical information may be released to the public.

Howard E. Haber Date

EMPLOYMENT

2020–present	Research Professor of Physics, Department of Physics, UC Santa Cruz
1990–2020	Professor of Physics, Department of Physics, UC Santa Cruz
1989–1990	Associate Professor of Physics, Department of Physics, UC Santa Cruz
1988–1989	Assistant Professor of Physics, Department of Physics, UC Santa Cruz
1984–1988	Adjunct Assistant Professor of Physics, Department of Physics, UC Santa Cruz
1982–1984	Assistant Research Physicist/Visiting Assistant Professor, UC Santa Cruz
1980–1982	Postdoctoral Research Associate, University of Pennsylvania
1978–1980	Postdoctoral Research Associate, Theoretical Physics Group, Lawrence Berkeley Laboratory
1975–1978	Research Assistant, University of Michigan
1973–1978	Teaching Assistant, University of Michigan

EDUCATION

Ph.D., Physics	University of Michigan, 1978
S.M., Physics	Massachusetts Institute of Technology, 1973
S.B., Physics	Massachusetts Institute of Technology, 1973
S.B., Math	Massachusetts Institute of Technology, 1973

ACADEMIC WEB PAGE OF HOWARD E. HABER

`https://scipp-legacy.pbsci.ucsc.edu/~haber/`

RECENT RESEARCH INTERESTS

The basic themes underlying my research program involve the study of: (i) the dynamics responsible for electroweak symmetry breaking; (ii) the theory and phenomenology of Higgs bosons; (iii) TeV-scale supersymmetry as a framework for incorporating a weakly-coupled Higgs sector; (iv) the phenomenology of signals for new physics beyond the Standard Model at the Large Hadron Collider (LHC) and future colliders; and (v) connections of low-energy phenomena with fundamental scales that lie beyond the TeV scale (e.g. lepton number violation and implications for neutrino masses).

After more then ten years after the discovery of the Higgs boson in 2012 at the Large Hadron Collider (LHC), many properties of this spin-zero particle have been measured. These results have profound implications for the dynamics of electroweak symmetry breaking and the possible structure of new physics that may lie beyond the Standard Model (SM) of particle physics. For example, most approaches to physics beyond the SM include extended Higgs sectors. Present Higgs data suggest that the properties of one of the scalars of the Higgs sector (identified with the observed Higgs boson) must have properties that closely approximate that of the SM Higgs boson. This constraint in turn imposes important constraints on any SM extension. The two-Higgs doublet model (2HDM) is a convenient theoretical laboratory for the study of extended Higgs sectors. Indeed, the two doublet extended Higgs sector is a key component of the simplest supersymmetric extension of the SM.

The theoretical structure and phenomenological profile of the 2HDM has attracted much attention in recent years. Starting with a seminal paper in collaboration with Sacha Davidson published in 2005, my work has advocated the importance of a basis-independent treatment of the 2HDM. Since the discovery of the Higgs boson, much of my research efforts have focused on the relevance of the so-called decoupling and alignment limits of the 2HDM in which one of scalars closely resembles the SM Higgs boson. The basis-independent technology provides a very powerful and simple framework for studying and interpreting these limits.

If new physics beyond the SM emerges at the LHC, it will be essential to develop techniques for measuring new particle interaction strengths at high energy colliders. By detecting relations among various independent couplings, one can ascertain underlying symmetries and distinguish among different theoretical interpretations of the new physics. For example, with sufficient precision, it will be possible to provide convincing evidence for or against a supersymmetric interpretation of new fundamental physics phenomena. A precision Higgs program at the LHC and at a future collider can also provide important clues as to what may lie beyond the Standard Model.

PROFESSIONAL COMPETENCE AND ACTIVITY

Professional Activities

Honors and Awards

2023	American Physical Society Outstanding Referee
2018	Simons GGI Visiting Scientist Fellowship, The Galileo Galilei Institute for Theoretical Physics, Arcetri, Florence, Italy
2017	Co-recipient of the American Physical Society J.J. Sakurai Prize for Theoretical Particle Physics ($10,000, shared among the four recipients)

2015	Received the honorary designation of Distinguished Professor of Physics
2013	Selected (with Abraham Seiden) to deliver the UCSC Faculty Research Lecture in February, 2014
2013	Finalist for an Excellence in Teaching Award, chosen by the Committee on Teaching of the UCSC Faculty Senate
2009	Alexander von Humboldt Research Award, €60,000
2008–2011	Visiting Professor, Institute for Particle Physics Phenomenology, University of Durham, England
1998	Frontier Fellow, Fermilab
1995	Scientific Associate, CERN
1993	elected Fellow of the American Physical Society
1985–1988	Department of Energy Outstanding Junior Investigator

Institutional Affiliations

2015-present	CERN User
2013–present	Honorary Member of the Aspen Center for Physics
2013–present	Lab Affiliate, Lawrence Berkeley National Laboratory
1998–2024	Fermilab User
1982–present	Lab Affiliate, SLAC National Accelerator Center

Grants and Contracts

2025–2026	Department of Energy Research Grant (with Wolfgang Altmannshofer, Michael Dine, Stefania Gori, Stefano Profumo, and Edgar Shaghoulian), $521,000
2024–2025	Department of Energy Research Grant (with Wolfgang Altmannshofer, Michael Dine, Stefania Gori, Stefano Profumo, and Edgar Shaghoulian), $504,000
2023–2024	Department of Energy Research Grant (with Wolfgang Altmannshofer, Michael Dine, Stefania Gori, Stefano Profumo, and Edgar Shaghoulian), $487,000
2022–2023	Department of Energy Research Grant (with Wolfgang Altmannshofer, Michael Dine, Stefano Profumo), $382,000
2021–2022	Department of Energy Research Grant (with Wolfgang Altmannshofer, Michael Dine, Stefano Profumo), $371,000
2020–2021	Department of Energy Research Grant (with Wolfgang Altmannshofer, Michael Dine, Stefano Profumo), $210,000
2019–2020	Department of Energy Research Grant (with Michael Dine and Stefano Profumo), $317,000
2018–2019	Department of Energy Research Grant (with Michael Dine and Stefano Profumo), $308,000
2017–2018	Department of Energy Research Grant (with Michael Dine and Stefano Profumo), $299,000

2016–2017	Department of Energy Research Grant (with Thomas Banks, Michael Dine and Stefano Profumo), $403,000
2015–2016	Department of Energy Research Grant (with Thomas Banks, Michael Dine and Stefano Profumo), $411,000
2014–2015	Department of Energy Research Grant (with Thomas Banks, Michael Dine and Stefano Profumo), $420,000
2013–2014	Department of Energy Research Grant (with Thomas Banks, Michael Dine and Stefano Profumo), $411,000 (eleven months)
2012–2013	Department of Energy Research Grant (with Thomas Banks, Michael Dine and Stefano Profumo), $123,000 (six months)
2011–2012	Department of Energy Research Grant (with Thomas Banks, Michael Dine and Stefano Profumo), $474,000
2010–2011	Department of Energy Research Grant (with Thomas Banks and Michael Dine), $410,000
2009–2010	Department of Energy Research Grant (with Thomas Banks and Michael Dine), $403,000
2008–2009	Department of Energy Research Grant (with Thomas Banks and Michael Dine), $412,000
2007–2008	Department of Energy Research Grant (with Thomas Banks and Michael Dine), $391,000
2006–2007	Department of Energy Research Grant (with Thomas Banks and Michael Dine), $380,000
2005–2006	Department of Energy Research Grant (with Thomas Banks and Michael Dine), $370,000
2004–2005	Department of Energy Research Grant (with Thomas Banks and Michael Dine), $375,000
2003–2004	Department of Energy Research Grant (with Thomas Banks and Michael Dine), $395,000
2002–2003	Department of Energy Research Grant (with Thomas Banks and Michael Dine), $360,000
2001–2002	Department of Energy Research Grant (with Thomas Banks and Michael Dine), $330,000
2000–2001	Department of Energy Research Grant (with Thomas Banks and Michael Dine), $300,000
2000	NSF grant in support of the RADCOR-2000 conference, $5,000
1999–2000	Department of Energy Research Grant (with Michael Dine), $170,000
1998-1999	Department of Energy Research Grant (with Michael Dine), $160,000
1997–1998	Department of Energy Research Grant (with Michael Dine), $146,000
1997–2000	US–Israel Bi-national Science Foundation grant (with Yosef Nir and Michael Dine)
1996–1998	Maria Sklodowska-Curie Joint Fund, Poland–USA (with Stefan Pokorski and Michael Dine)
1996–1997	Department of Energy Research Grant (with Michael Dine), $141,000

1995–1996	Department of Energy Research Grant (with Michael Dine), $144,000
1994–1995	Department of Energy Research Grant (with Michael Dine), $152,000
1993–1996	US–Israel Bi-national Science Foundation grant (with Yosef Nir and Michael Dine)
1993–1994	Department of Energy Research Grant (with Michael Dine), $160,000
1993–1994	Texas National Laboratory Research Commission Grant (with John Gunion), $120,000
1992–1993	Department of Energy Research Grant (with Michael Dine), $160,000
1991–1992	Department of Energy Research Grant (with Michael Dine), $160,000
1990–1991	Department of Energy Research Grant (with Michael Dine), $135,000
1989–1990	Department of Energy Research Grant, $90,000
1988–1989	Department of Energy Research Grant (with Thomas Banks), $178,386
1987–1988	Department of Energy Outstanding Junior Investigator, and Research Grant (with Thomas Banks), $160,000
1986–1987	Department of Energy Outstanding Junior Investigator Research Grant, $60,000
1986	grants for the 1986 Theoretical Advanced Study Institute (with Joel Primack) Department of Energy: $30,000 and National Science Foundation: $30,000
1985–1986	Department of Energy Outstanding Junior Investigator Research Grant, $57,000
1985	Department of Energy Outstanding Junior Investigator Research Grant, $30,000

Partner to International research efforts

2017–2021	Member of the Harmonia project, under contract UMO-2015/18/M/ST2/0051, supported by the Polish National Science Center for Scientific Research
2015–2019	*Non Minimal Higgs*, MSCA-RISE grant of the European Commission (Marie Skłodowska-Curie Actions), €301,500

Professional Organizations

American Physical Society
American Association of Physics Teachers
Sigma Xi, University of California, Santa Cruz Chapter
Mathematical Association of America

WRITINGS AND CREATIVE ACTIVITIES IN PROGRESS

Articles submitted to Professional Journals

1. Correlating Resonant Di-Higgs and Tri-Higgs Production to $H \to VV$ in the 2HDM, G. Coloretti, A. Crivellin, and H.E. Haber, arXiv:2512.24868 [hep-ph].

PUBLISHED WRITINGS AND CREATIVE ACTIVITIES

Books

1. *From Spinors to Supersymmetry*, H.K. Dreiner, H.E. Haber, and S.P. Martin (Cambridge University Press, Cambridge, UK, 2023).

2. *The Higgs Hunter's Guide*, J.F. Gunion, H.E. Haber, G.L. Kane, and S. Dawson, Frontiers in Physics Lecture Note Series #80, (Addison-Wesley Publishing Company, Redwood City, CA, 1990); paperback edition: (Westview Press, Boulder, CO, 2000).

Edited Books

1. *CPNSH: Workshop on CP Studies and Non-Standard Higgs Physics, May 2004—December 2005,* edited by S. Kraml *et al.*, CERN Yellow Book, CERN-2006-009 (2006).

2. *Particle Physics and Cosmology: The Quest for Physics Beyond the Standard Model(s), Proceedings of the 2002 Theoretical Advanced Study Institute in Elementary Particle Physics,* H.E. Haber and A.E. Nelson, editors (World Scientific, Singapore, 2004).

3. *Proceedings of the 5th International Symposium on Radiative Corrections (RADCOR 2000),* H.E. Haber, editor (SLAC-R-579; eConf C000911).

4. *Electroweak Symmetry Breaking and New Physics at the TeV Scale,* T.L. Barklow, S. Dawson, H.E. Haber, and J. Siegrist, editors (World Scientific, Singapore, 1996).

5. *From the Planck Scale to the Weak Scale: Toward a Theory of the Universe, Proceedings of the 1986 Theoretical Advanced Study Institute in Elementary Particle Physics*, vols. I and II, H.E. Haber, editor, (World Scientific, Singapore, 1987).

6. *Proceedings of the Theoretical Symposium on Intense Medium Energy Sources of Strangeness,* T. Goldman, H.E. Haber, and H.F.-W. Sadrozinski, editors, (American Institute of Physics, New York, 1983).

Chapters in Books

1. Supersymmetry, Part I (Theory), B.C. Allanach and H.E. Haber, in *Review of Particle Physics*, S. Navas *et al.* [Particle Data Group], *Physical Review D* **110**, 030001 (2024).

2. Supersymmetry, Part I (Theory), B.C. Allanach and H.E. Haber, in *Review of Particle Physics*, R.L. Workman *et al.* [Particle Data Group], *Progress of Theoretical and Experimental Physics* **2022**, 083C01 (2022).

3. Supersymmetry, Part I (Theory), B.C. Allanach and H.E. Haber, in *Review of Particle Physics*, P.A. Zyla *et al.* [Particle Data Group], *Progress of Theoretical and Experimental Physics* **2020**, 083C01 (2020).

4. Supersymmetry, Part I (Theory), H.E. Haber, in *Review of Particle Physics*, M. Tanabashi *et al.* [Particle Data Group], *Physical Review* **D98**, 030001 (2018).

5. Supersymmetric Theory and Models, H.E. Haber and L. Stephenson Haskins, in *Anticipating The Next Discoveries In Particle Physics*, Proceedings of the 2016 Theoretical Advanced Study Institute in Elementary Particle Physics, edited by Rouven Essig and Ian Low (World Scientific, Singapore, 2018) pp. 355–499.

6. Supersymmetry, Part I (Theory), H.E. Haber, in *Review of Particle Physics*, C. Patrignani *et al.* [Particle Data Group], *Chinese Physics* **C40**, 100001 (2016).

7. Supersymmetry, Part I (Theory), H.E. Haber, in *Review of Particle Physics*, K.A. Olive *et al.* [Particle Data Group], *Chinese Physics* **C38**, 090001 (2014).

8. Supersymmetry, Part I (Theory), H.E. Haber, in *Review of Particle Physics*, J. Beringer *et al.* [Particle Data Group], *Phys. Rev.* **D86**, 010001 (2012).

9. Low-Energy Supersymmetry at Future Colliders, J.F. Gunion and H.E. Haber, updated chapter in *Perspectives on Supersymmetry II*, edited by G.L. Kane (World Scientific, Singapore, 2010) pp. 420–445.

10. Supersymmetry, Part I (Theory), H.E. Haber, in *Review of Particle Physics*, K. Nakamura *et al.* [Particle Data Group], *Journal of Physics* **G37**, 075021 (2010).

11. Supersymmetry, Part I (Theory), H.E. Haber, in *Review of Particle Physics*, C. Amsler *et al.* [Particle Data Group], *Phys. Lett.* **B667**, 1–1340 (2008).

12. Supersymmetry, Part I (Theory), H.E. Haber, in *Review of Particle Physics*, W.-M. Yao *et al.* [Particle Data Group], *Journal of Physics* **G33**, 1–1232 (2006).

13. Higgs Physics at the Linear Collider, J.F. Gunion, H.E. Haber and R. Van Kooten, in *Linear Collider Physics in the New Millennium*, edited by K. Fujii, D. Miller and A. Soni, (World Scientific, Singapore, 2005) pp. 41–133.

14. Supersymmetry, Part I (Theory), H.E. Haber, in *Review of Particle Physics*, S. Eidelman *et al.* [Particle Data Group], *Phys Lett.* **B592**, 1–1109 (2004).

15. Supersymmetry, Part I (Theory), H.E. Haber, in *Review of Particle Physics*, K. Hagiwara *et al.* [Particle Data Group], *Phys Rev.* **D66**, 010001 (2002).

16. Supersymmetry, Part I (Theory), H.E. Haber, in *Review of Particle Physics*, D.E. Groom *et al.* [Particle Data Group], *Eur. Phys. J.* **C15**, 1–878 (2000).

17. Low-Energy Supersymmetry at Future Colliders, J.F. Gunion and H.E. Haber, in *Perspectives on Supersymmetry*, edited by G.L. Kane (World Scientific, Singapore, 1998) pp. 235–255.

18. Supersymmetry, Part I (Theory), H.E. Haber, in *Review of Particle Physics*, C. Caso *et al.* [Particle Data Group], *Eur. Phys. J.* **C3**, 1–794 (1998).

19. Higgs Boson Masses and Couplings in the Minimal Supersymmetric Model, H.E. Haber, in *Perspectives on Higgs Physics II*, edited by G.L. Kane (World Scientific, Singapore, 1997) pp. 23–67.

20. Electroweak Symmetry Breaking and Beyond the Standard Model, S. Dawson and H.E. Haber, in *Electroweak Symmetry Breaking and New Physics at the TeV Scale*, edited by T. Barklow, S. Dawson, H.E. Haber and J. Siegrist (World Scientific, Singapore, 1996) pp. 1–22.

21. Supersymmetry, H.E. Haber, in *Review of Particle Physics*, R.M. Barnett *et al.* [Particle Data Group], *Phys. Rev.* **D54**, 1–720 (1996).

22. Note on Supersymmetry, H.E. Haber, in *Review of Particle Properties*, L. Montanet *et al.* [Particle Data Group], *Phys. Rev.* **D45**, 1173–1823 (1994).

23. Introductory Low-Energy Supersymmetry, H.E. Haber, in *Recent Directions in Particle Theory*, Proceedings of the 1992 Theoretical Advanced Study Institute in in Elementary Particle Physics, Boulder, CO, June 1–26, 1992, edited by J. Harvey and J. Polchinski (World Scientific, Singapore, 1993) pp. 589–686.

24. Higgs bosons in the Minimal Supersymmetric Model: The Influence of Radiative Corrections, H.E. Haber, in *Perspectives on Higgs Physics*, edited by G.L. Kane (World Scientific, Singapore, 1993) pp. 79–129.

25. Note on Supersymmetry, H.E. Haber, in *Review of Particle Properties*, K. Hikasa *et al.* [Particle Data Group], *Phys. Rev.* **D45**, S1 (1992) [Erratum: *Phys. Rev.* **D46**, 5210 (1992).

26. Higgs Physics: Theory and Phenomenology, H.E. Haber, in *The Standard Model and Beyond*, Proceedings of the 1990 Mt. Sorak Symposium on Theoretical Physics, edited by J.E. Kim, (World Scientific, Singapore, 1991) pp. 28–104.

27. Lectures on Electroweak Symmetry Breaking, H.E. Haber, in *Testing the Standard Model*, Proceedings of the 1990 Theoretical Advanced Study Institute in Elementary Particle Physics, edited by M. Cvetič and Paul Langacker (World Scientific, Singapore, 1991) pp. 340–475.

Articles published on the arXiv

1. Supersymmetry, Part I (Theory), B.C. Allanach and H.E. Haber, arXiv:2401.03827 [hep-ph], in S. Navas et al. (Particle Data Group), Phys. Rev. **D110**, 030001 (2024) and 2025 update.

Peer-reviewed Articles in Professional Journals

1. Extending the symmetries of the generalized CP-symmetric 2HDM scalar potential to the Yukawa sector, S. Carrolo, H.E. Haber, L. Lourenco, and J.P. Silva, *Phys. Rev.* **D112**, 035024 (2025).

2. RG-stable parameter relations of a scalar field theory in absence of a symmetry, H.E. Haber and P.M. Ferreira, *Eur. Phys. J.* **C85**, 541 (2025).

3. Correlating $A \to \gamma\gamma$ with EDMs in the 2HDM in light of the diphoton excesses at 95 GeV and 152 GeV, S. Banik, G. Coloretti, A. Crivellin, and H.E. Haber, *Phys. Rev.* **D111**, 075021 (2025).

4. Explicit form for the most general Lorentz transformation revisited, H.E. Haber, *Symmetry* 2024, 16, 1155.

5. Classes of complete dark photon models constrained by Z-Physics, M.P. Bento, H.E. Haber and J.P. Silva, *Physics Letters* **B850**, 138501 (2024).

6. Higgs Boson Physics: The View Ahead, H.E. Haber, *Letters in High Energy Physics*, LHEP-451 (2023).

7. Tree-level Unitarity in $\mathrm{SU}(2)_L \times \mathrm{U}(1)_Y \times \mathrm{U}(1)_{Y'}$ Models, M.P. Bento, H.E. Haber and J.P. Silva, *JHEP* **2310**, 083 (2023).

8. Accommodating Hints of New Heavy Scalars in the Framework of the Flavor-Aligned Two-Higgs-Doublet Model, J.M. Connell, P.M.Ferreira and H.E. Haber, *Phys. Rev.* **D108**, 055031 (2023).

9. P-even, CP-violating Signals in Scalar-Mediated Processes, H.E. Haber, V. Keus and R. Santos, *Phys. Rev.* **D106**, 095038 (2022).

10. Exceptional regions of the 2HDM parameter space, H.E. Haber and J.P. Silva, *Phys. Rev.* **D103**, 115012 (2021).

11. Higgs-mass predictions in the MSSM and beyond, P. Slavich, S. Heinemeyer, E. Bagnaschi, H. Bahl, M. Goodsell, H.E. Haber *et al.*, *Eur. Phys. J.* **C81**, 5 (2021).

12. A natural mechanism for approximate Higgs alignment in the 2HDM, P. Draper, A. Ekstedt and H.E. Haber, *JHEP* **2105**, 235 (2021).

13. A tale of three diagonalizations, H.E. Haber, *Int. J. Mod Phys.* **A36**, 2130002 (2021).

14. Useful relations among the generators in the defining and adjoint representations of $\mathrm{SU}(N)$, H.E. Haber, *SciPost Phys. Lect. Notes* **21** (2021).

15. Basis-independent treatment of the complex 2HDM, R. Boto, T.V. Fernandes, H.E. Haber, J.C. Romão and J.P. Silva, *Phys. Rev.* **D101**, 055023 (2020).

16. Symmetries and Mass Degeneracies in the Scalar Sector, H.E. Haber, O.M. Ogreid, P. Osland and M.N. Rebelo, *JHEP* **1901**, 042 (2019).

17. Heavy Higgs boson decays in the alignment limit of the 2HDM, B. Grzadkowski, H.E. Haber, O.M. Ogreid and P. Osland, *JHEP* **1812**, 056 (2018).

18. Multi-Higgs doublet models: the Higgs-fermion couplings and their sum rules, M.P. Bento, H.E. Haber, J.C. Romão and J.P. Silva, *JHEP* **1810**, 143 (2018).

19. Multi-Higgs doublet models: physical parametrization, sum rules and unitarity bounds, M.P. Bento, H.E. Haber, J.C. Romão and J.P. Silva, *JHEP* **1711**, 095 (2017).

20. The Impact of Two-Loop Effects on the Scenario of MSSM Higgs Alignment without Decoupling, H.E. Haber, S. Heinemeyer and T. Stefaniak, *Eur. Phys. J.* **C77**, 742 (2017).

21. High scale flavor alignment in two-Higgs doublet models and its phenomenology, S. Gori, H.E. Haber and E. Santos, *JHEP* **1706**, 110 (2017).

22. The Light and Heavy Higgs Interpretation of the MSSM, P. Bechtle, H.E. Haber, S. Heinemeyer, O. Stål, T. Stefaniak, G. Weiglein and L. Zeune, *Eur. Phys. J.* **C77**, 67 (2017).

23. Perturbation Theory in Supersymmetric QED: Infrared Divergences and Gauge Invariance, M. Dine, P. Draper, H.E. Haber and L.S. Haskins, *Phys. Rev.* **D94**, 095003 (2016).

24. Partially Natural Two Higgs Doublet Models, P. Draper, H.E. Haber and J.T. Ruderman, *JHEP* **1606**, 124 (2016).

25. Scrutinizing the alignment limit in two-Higgs-doublet models. II. $m_H = 125$ GeV, J. Bernon, J.F. Gunion, H.E. Haber, Y. Jiang and S. Kraml, *Phys. Rev.* **D93**, 035027 (2016).

26. Alignment limit of the NMSSM Higgs sector, M. Carena, H.E. Haber, I. Low, N.R. Shah and C.E.M. Wagner, *Phys. Rev.* **D93**, 035013 (2016).

27. New LHC Benchmarks for the CP-conserving Two-Higgs-Doublet Model, H. E. Haber and O. Stål, *Eur. Phys. J.* **C75**, 491 (2015).

28. Scrutinizing the alignment limit in two-Higgs-doublet models: $m_h = 125$ GeV, J. Bernon, J. F. Gunion, H. E. Haber, Y. Jiang and S. Kraml, *Phys. Rev.* **D92**, 075004 (2015).

29. Preserving the validity of the Two-Higgs Doublet Model up to the Planck scale, P. Ferreira, H. E. Haber and E. Santos, *Phys. Rev.* **D92**, 033003 (2015).

30. Complementarity between nonstandard Higgs boson searches and precision Higgs boson measurements in the MSSM, M. Carena, H.E. Haber, I. Low, N.R. Shah and C.E.M. Wagner, *Phys. Rev.* **D91**, 035003 (2015).

31. Probing wrong-sign Yukawa couplings at the LHC and a future linear collider, P.M. Ferreira, J.F. Gunion, H.E. Haber and R. Santos, *Phys. Rev.* **D89**, 115003 (2014).

32. Decoupling of the Right-handed Neutrino Contribution to the Higgs Mass in Supersymmetric Models, P. Draper and H.E. Haber, *Eur. Phys. J.* **C73**, 2522 (2013).

33. Mass-degenerate Higgs bosons at 125 GeV in the two-Higgs-doublet model, P.M. Ferreira, R. Santos, H.E. Haber and J.P. Silva, *Phys. Rev.* **D87**, 055009 (2013).

34. A Group-theoretic Condition for Spontaneous CP Violation, H.E. Haber and Z. Surujon, *Phys. Rev.* **D86**, 075007 (2012).

35. Basis-independent methods for the two-Higgs-doublet model III: The CP-conserving limit, custodial symmetry, and the oblique parameters S, T, U, H.E. Haber and D. O'Neil, *Phys. Rev.* **D83**, 055017 (2011).

36. Geometric picture of generalized-CP and Higgs-family transformations in the two-Higgs-doublet model, P. M. Ferreira, H.E. Haber, M. Maniatis, O. Nachtmann and J.P. Silva, *Int. J. Mod. Phys.* **A26**, 769 (2011).

37. Supersymmetric Monojets at the Large Hadron Collider, B.C. Allanach, S. Grab and H.E. Haber, *JHEP* **1101**, 138 (2011) [Erratum: **1107**, 087 (2011); **1109**, 027 (2011)].

38. Two-component spinor techniques and Feynman rules for quantum field theory and supersymmetry, H.K. Dreiner, H.E. Haber and S.P. Martin, *Physics Reports* **494**, 1 (2010).

39. Basis invariant conditions for supersymmetry in the two-Higgs-doublet model, P.M. Ferreira, H.E. Haber and J.P. Silva, *Phys. Rev.* **D82**, 016001 (2010).

40. Note on the pseudo-Nambu-Goldstone Boson of Meta-stable SUSY Violation, T. Banks and H.E. Haber, *JHEP* **0911**, 097 (2009).

41. Generalized CP symmetries and special regions of parameter space in the two-Higgs-doublet model, P.M. Ferreira, H.E. Haber and J.P. Silva, *Phys. Rev.* **D79**, 116004 (2009).

42. Hard supersymmetry-breaking "wrong-Higgs" couplings of the MSSM, H.E. Haber and J.D. Mason, *Phys, Rev.* **D77**, 115011 (2008).

43. Seesaw mechanism in the sneutrino sector and its consequences, A. Dedes, H.E. Haber and J. Rosiek, *JHEP* **0711**, 059 (2007).

44. The neutralino sector in the U(1)-extended supersymmetric standard model, S.Y. Choi, H.E. Haber, J. Kalinowski and P.M. Zerwas, *Nucl. Phys.* **B778**, 85 (2007).

45. Basis-independent methods for the two-Higgs-doublet model. II. The Significance of $\tan\beta$, H.E. Haber and D. O'Neil, *Phys. Rev.* **D74**, 015018 (2006) [Erratum: *Phys. Rev.* **D74**, 059905 (2006)].

46. Supersymmetry parameter analysis: SPA convention and project, J.A. Aguilar-Saavedra *et al.*, Eur. Phys. J. **C46**, 43 (2006).

47. Physics Interplay of the LHC and the International Linear Collider, G. Weiglein *et al.* [The LHC/ILC Study Group], *Physics Reports* **426**, 47 (2006).

48. Conditions for explicit CP-Violation in the two-Higgs-doublet model, J.F. Gunion and H.E. Haber, *Phys. Rev.* **D72**, 095002 (2005).

49. Basis-independent methods for the two-Higgs-doublet model, S. Davidson and H.E. Haber, *Phys. Rev.* **D72**, 035004 (2005) [Erratum: *Phys. Rev.* **D72**, 099902 (2005)].

50. The CP-conserving two-Higgs-doublet model: The approach to the decoupling limit, J.F. Gunion and H.E. Haber, *Phys. Rev.* **D67**, 075019 (2003).

51. The would-be majoron in R-parity violating supersymmetry, Y. Grossman and H.E. Haber, *Phys. Rev.* **D67**, 036002 (2003).

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83. Implications for Supersymmetry of the CERN Monojets, H.E. Haber, in *The Santa Fe Meeting,* First Annual Meeting (New Series) of the Division of Particles and Fields of the American Physical Society, Oct. 31-Nov. 3, 1984, edited by T. Goldman and M.M. Nieto (World Scientific, Singapore, 1985) p. 390.

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85. Simulating Supersymmetry at the SSC, R.M. Barnett and H.E. Haber, *ibid.*, p. 296.

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92. Low Energy Signals of Composite Models, R. Barbieri *et al.*, published in the *Proceedings of the Workshop on Electroweak Symmetry Breaking,* p. 37 (1984).

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UNPUBLISHED NOTES AND OTHER WRITINGS

Note: The unpublished notes and other writings listed below were prepared either as supplements to my teaching or as a set of notes used in research projects. Links to these notes can be found on my UCSC Academic webpage, `http://scipp.ucsc.edu/~haber/#sec6`.

1. *The Hamiltonian of a free Majorana fermion field*

2. *Acceleration and Force in Special Relativity*

3. *Thomas Precession and the BMT equation*

4. *The tensor spherical harmonics*

5. *Evaluating integrals arising from Barr-Zee diagrams*
6. *Exponentiating the Lie algebra of the Lorentz group*
7. *Rational Approximatoons to* $\ln 2$
8. *Generalized Functions for Physics*
9. *Evaluating the finite part of the Passarino-Veltman function* $B_0(p^2; m_1^2, m_2^2)$
10. *Evaluating the one-loop function arising in* $h \to \gamma\gamma$
11. *Analytic formulae for the Feynman propagator in coordinate space*
12. *A Tale of Three Diagonalizaitons*
13. *Notes on the Matrix Exponential and Logarithm*
14. *The characteristic polynomial*
15. *What is the group of conjugate symplectic matrices?*
16. *Parameterization of real orthogonal antisymmetric matrices*
17. *Toward a set of 2HDM benchmarks*
18. *The eigenvalues of the quadratic Casimir operator and second-order indices of a simple Lie algebra*
19. *Notes on basis changes and matrix diagonalization*
20. *Notes on the complex inverse trigonometric and hyperbolic functions and their principal values*
21. *Electron wave function and mass renormalization in QED*
22. *Proof of a trace inequality in matrix algebra*
23. *Notes on the spontaneous breaking of SU(N) and SO(N) via a second-rank tensor multiplet*
24. *Notes on antisymmetric matrices and the pfaffian*
25. *Complex representation of scalar fields and the embedding of U(n) in SO(2n)*
26. *The probability that a product of random numbers is less than a fixed constant*
27. *Massless Majorana and Weyl fermions cannot be distinguished*

MISCELLANEOUS

1. A Q&A panel with SCIPP physicists, Howard Haber, Jason Nielsen, Stefano Profumo, Alexander Grillo, Ryan Reece and Sheena Schier following a screening of the documentary film *Particle Fever* at the Nickelodeon on March 14, 2014.
   See `http://news.ucsc.edu/2014/02/particle-fever.html`

2. Aspen Center for Physics presents: the Heinz R. Pagels Public Lecture Series—*What's Coming at the Large Hadron Collider? Dark Matter? Black Holes? New Dimensions in Space* with Michael Turner, Marcela Carena, Patrick Fox, Howard Haber, Elizabeth Simmons on August 14, 2008. This event was televised.

3. The EPP Questions: Response from the LHC/ILC Study Group, J. Conway, J.F. Gunion, H.E. Haber, S. Heinemeyer, G. Moortgat-Pick and G. Weiglein, submitted to the Elementary Particle Physics in the 21st Century (EPP 2010) Panel of the National Research Council of the National Academy of Sciences (May, 2005).

UNIVERSITY SERVICE

Administrative Appointments and Service

Department:

2019–2020	Member, Undergraduate Curriculum Committee
Spring 2019	Member, Graduate Committee
2018–2019	Member, Community Prize & Development Committee
Spring 2018	Co-Chairman, Physics Colloquium Committee
2017-2018	Chairman, Graduate Recruitment Committee
2016-2018	Member, Faculty Recruitment Committee
2016-2017	Member, Graduate Recruitment Committee
2015-2016	Chairman, Graduate Recruitment Committee
2015	Member, Physics Department Colloquium Committee
2015	Member, Graduate Recruitment Committee
2012–2013	Chairman, Graduate Recruitment Committee
2012–2013	Chairman, Physics Graduate Committee
2009–2011	Member, Graduate Recruitment Committee
2005–2008	Chairman, Graduate Recruitment Committee
2003–2004	Co-chairman, Physics Colloquium Committee
2003–2004	Member, Physics Undergraduate Committee
1997–2003	Chairman, Physics Undergraduate Committee
1995–1996	Chairman, Physics Colloquium Committee
1994–1997	Member, Physics Undergraduate Committee
1994	Member, Physics Colloquium Committee
1990–1994	Chairman, Physics Graduate Committee
1990–1991	Member, Search Committee, Target of Opportunity Position
1989–1990	Member, Graduate Committee
1989–1990	Member, Search Committee, Chairman, HEP Theory Position
1988–1989	Chairman, Computer Committee

Academic Senate:

2021–2022	Member, Committee on the Faculty Research Lecture
2014–2016	Member, Senate Committee on Library and Scholarly Communication (COLASC)
December, 2007	Chair, University Ad-Hoc Committee (for faculty promotion)
June, 2007	Chair, University Ad-Hoc Committee (for faculty promotion)
2001–2004	Member, University Ad-Hoc Committee (for faculty promotion)
2000	Chair, University Ad-Hoc Committee (for faculty promotion)
1999–2000	Member, Committee on Rules, Jurisdiction and Elections
1999	Chair, University Ad-Hoc Committee (for faculty promotion)
1998	Chair, University Ad-Hoc Committee (for faculty promotion)
1998	Co-authored (with Professor David M. Harrington): *Faculty Perceptions of a UCSC Research Environment in Need of Restoration and Improvement*, sponsored by the UCSC Committee on Research and contributed to the Advisory Report of the Millennium Committee [see: `http://scipp.ucsc.edu/~haber/cor/ucscresearch.html`].
1997	Member, University Ad-Hoc Committee (for faculty promotion)
1996	Chair, UCSC Campus forum to address the question: Should UC renew its contract with the Department of Energy (DOE) to manage the Lawrence Livermore National Laboratory and Los Alamos National Laboratory? [For the announcement of the forum, see `http://scipp.ucsc.edu/~haber/UC_CORP/santacruz.html`].
1995-1998	Chairman, Committee on Research (UCSC Academic Senate)
1992	Member, University Ad-Hoc Committee (for faculty promotion)

UC Office of the President:

1995-1998	Member, University of California Committee on Research Policy (UCORP)
1995–1996	Webmaster for UCORP. Created two web pages: a public page reporting UCORP activities [`http://scipp.ucsc.edu/~haber/UC_CORP/`] and a private page [`http://scipp.ucsc.edu/~haber/ucorp/`] which documented ongoing UCORP activities. A special web page was created to document the ongoing campus debate on the question of whether UC should renew its contract with the Department of Energy (DOE) to manage the Lawrence Livermore National Laboratory and Los Alamos National Laboratory [see `http://scipp.ucsc.edu/~haber/UC_CORP/doelabs.html`].

Division of Biological and Physical Sciences:

2004–2006	Chair, Divisional Committee on Academic Personnel
1999–2004	Member, Divisional Committee on Academic Personnel
1999–2000	Member, Divisional Curriculum Committee

Miscellaneous UC Service:

2002–2005	Member, Dean's Committee on Opportunity for Particle Theory at UC Davis.

OUTSIDE PROFESSIONAL ACTIVITIES

Invited Talks at Conferences and Workshops

November, 2025	BSM Higgs Physics and GW (Georg Fest), at DESY in Hamburg, Germany, "Celebrating Georg Weiglein60 at two loops (and beyond)"
October, 2025	HHH Workshop 2025, at IUC Dubrovnik, Croatia, "Detecting P-even, CP-violation at future colliders in multiple Higgs boson production"
September, 2025	Scalars 2025, at the University of Warsaw in Warsaw, Poland, "RG-stability of parameter relations in the absence of a conventional symmetry"
June, 2025	The 7th International Workshop on "Higgs as a Probe of New Physics" (HPNP2025), at Osaka University, in Osaka, Japan, "RG-stable parameter relations of a scalar field theory in absence of a symmetry"
May, 2025	Corfu2025 Workshop on Future Accelerators, at Mon-Repos in Corfu, Greece, "Higgs physics at future e^+e^- colliders"
October, 2024	Workshop on Extended scalar sectors from all angles, at CERN in Geneva, Switzerland, "Flavor-nondiagonal neutral Higgs Yukawa couplings revisited"
September, 2024	2024 Workshop on Multi-Higgs Models, in Lisbon, Portugal, "Flavor-nondiagonal neutral Higgs Yukawa couplings revisited"
June, 2024	SUSY 2024: 31st International Conference on Supersymmetry and Unification of Fundamental Interactions: Theory meets Experiment, in Madrid, Spain, " Classes of complete dark photon models constrained by Z Physics"
June, 2024	PLANCK 2024: 26th International Conference from the Planck Scale to the Electroweak Scale, in Lisbon, Portugal, "Flavor-nondiagonal neutral Higgs Yukawa couplings revisited"
May, 2024	Cosmology, Astrophysics, Theory and Collider Higgs 2024 (CATCH22+2), at the Dublin Institute for Advanced Study (DIAS), in Dublin, Ireland, "Classes of complete dark photon models constrained by Z Physics "
September, 2023	Scalars 2023, at the University of Warsaw in Warsaw, Poland, "Scalar revelations at future e^+e^- colliders"

September, 2023	Higgs Days at Santander 2023, in Santander, Spain, "Signals of new heavy scalars in the flavor-aligned 2HDM"
July, 2023	The XXX International Conference on Supersymmetry and Unification of Fundamental Interactions (SUSY 2023), at the University of Southampton, in Southampton, England, "Supersymmetry confronts a SM-like Higgs boson"
July, 2023	Pre-SUSY 2023, preceding the 30th International Conference on Supersymmetry and Unification of Fundamental Interactions, at the University of Southampton, in Southampton, England, "Supersymmetry and Higgs Physics" (two lectures)
June, 2023	The 6th International Workshop on "Higgs as a Probe of New Physics" (HPNP2023), at Osaka University, in Osaka, Japan, "Signals of new heavy scalars in the flavor-aligned 2HDM"
May, 2023	Beyond the SM from Colliders to the Early Universe: a symposium in honor of Marcela Carena and Carlos Wagner on the occasion of their 60th birthdays, at the University of Chicago in Chicago, IL USA and at Fermilab in Batavia, IL USA, "My Journey through Physics with Marcela and Carlos"
May, 2023	PLANCK 2023: 25th International Conference from the Planck Scale to the Electroweak Scale, at the University of Warsaw in Warsaw, Poland, "Higgs Boson Physics—The View Ahead"
May, 2023	International Workshop on Future Linear Colliders (LCWS2023), at SLAC National Accelerator Laboratory in Stanford, CA USA, "P-even, CP-violating Signals in Scalar-Mediated Processes"
March, 2023	Herbi-Fest, at the Bethe Center for Theoretical Physics in Bonn, Germany, "Adventures from Spinors to Supersymmetry"
August, 2022	Workshop on Multi-Higgs Models, at the Instituto Superior Técnico in Lisbon, Portugal, "P-even, CP-violating Signals in Scalar-Mediated Processes"
June, 2022	The XXIX International Conference on Supersymmetry and Unification of Fundamental Interactions (SUSY 2022), at the University of Ioannina in Ioannina, Greece, "The anapole moment of a charged lepton in softly-broken Supersymmetric QED"
December, 2021	DISCRETE 2020-2021 Workshop, "A natural mechanism for a SM-like Higgs boson in the 2HDM without decoupling"
August, 2021	Charged Higgs Online Workshop, "Extended Higgs sector at present and future colliders"
August, 2021	The 49th SLAC Summer Institute (SSI 2021)–The Higgs State Fair, at SLAC in Stanford, CA USA, "Higgs Boson Physic—The View Ahead"
March, 2021	The 5th International Workshop on "Higgs as a Probe of New Physics" Special Edition 2021 (HPNP2021), in Osaka, Japan, "Exceptional regions of the 2HDM parameter space"
September, 2019	Higgs Days 2019, in Santander, Spain, "Future Perspectives (Part 2)"
September, 2019	Scalars 2019, in Warsaw, Poland, "The Future of Particle Physics—A Theorist's Perspective"

September, 2019	Scalars 2019, in Warsaw, Poland, "Approximate alignment without decoupling in the 2HDM naturally"
August, 2019	Sorak Symposium reminiscence on Particle Physics, in South Korea,"Quo Vadis Higgs (or what the current Higgs data is trying to tell us)"
August, 2019	Sorak Symposium reminiscence on Particle Physics, in South Korea, "The incomplete and biased history of the Higgs boson"
May, 2019	7th RISE Collaboration Workshop: NonMinimalHiggs, in Helsinki Finland, "Approximate alignment without decoupling in the 2HDM naturally"
February, 2019	The 4th Toyama International Workshop on "Higgs as a Probe of New Physics 2019" (HPNP2019), in Osaka, Japan, "Symmetries and Mass Degeneracies in the Scalar Sector"
December, 2018	The 5th HARMONIA Warsaw-Lisbon-Catania-Dresden meeting, at the OCHOTA campus of the University of Warsaw, in Warsaw, Poland, "Symmetries and Mass Degeneracies in the Scalar Sector"
September, 2018	Workshop on Multi-Higgs Models, at the Instituto Superior Técnico in Lisbon, Portugal, "Symmetries and Mass Degeneracies in the Scalar Sector"
August, 2018	The 46th SLAC Summer Institute (SSI 2018)–Standard Model at 50: Successes and Challenges, at SLAC in Stanford, CA USA, "The woefully incomplete, unabashedly biased history of the Higgs Boson"
June, 2018	MASS2018: Origin of Mass at the High Energy and Intensity Frontier, at CP3 Origins in Odense, Denmark, "Beyond the Standard Model Higgs Boson"
May, 2018	PLANCK 2018: 21th International Conference from the Planck Scale to the Electroweak Scale, in Bonn, Germany, "Mass Degeneracies in Extended Higgs Sectors"
March, 2018	Rencontres de Moriond: QCD and High Energy Interactions, in La Thuile, Aosta Valley, Italy, "Approximate Higgs alignment without decoupling"
February, 2018	TRIUMF Theory Workshop on New Physics and the Higgs, at TRIUMF in Vancouver, BC, Canada, "Mass Degeneracies in Extended Higgs Sectors"
November, 2017	Scalars 2017, at the University of Warsaw, in Warsaw, Poland, "Replicating the Higgs Doublet"
September, 2017	Energy Frontier in Particle Physics: LHC and Future Colliders, at National Taiwan University in Taipei, Taiwan, "Alignment in Models of Extended Higgs Sectors"
September, 2017	GGI Workshop: "Collider Physics and the Cosmos", at the Galileo Galilei Institute for Theoretical Physics in Arcetri, Florence, Italy, "Non-minimal Higgs sectors"
May, 2017	2nd HARMONIA Meeting, in Warsaw, Poland, "In search of natural Higgs alignment without decoupling in the 2HDM"
May, 2017	PLANCK 2017: 20th International Conference from the Planck Scale to the Electroweak Scale, in Warsaw, Poland, "Alignment in extended Higgs models"

March, 2017	3rd RISE Collaboration Meeting: NonMinimalHiggs, in Toyama, Japan, "High scale flavor-aligned 2HDM"
March, 2017	The 3rd Toyama International Workshop on 'Higgs as a Probe of New Physics 2017' (HPNP2017), in Toyama, Japan, "A Theorist's Outlook for Higgs physics beyond the Standard Model"
January, 2017	The 2017 April American Physical Society Meeting in January, in Washington, DC, " Beyond the Standard Model Higgs Boson"
December, 2016	Helsinki Higgs Forum, at the Helsinki Institute of Physics in in Helsinki, Finland, "High scale flavor alignment in the 2HDM and its phenomenology"
November, 2016	Higgs Couplings 2016, at SLAC, Stanford, CA, "SUSY and the alignment limit"
October, 2016	Sixth International Workshop on the Prospects for Charged Higgs Discovery at Colliders (CHARGED 2016), in Uppsala, Sweden, " Future Higgs Studies: A Theorist's Outlook"
September, 2016	Higgs Days at Santander 2016, in Santander, Spain, " Alignment without decoupling in the MSSM"
September, 2016	Workshop on Multi-Higgs Models, in Lisbon, Portugal, " Flavor violation via Planck scale alignment in the 2HDM"
September, 2016	Higgs Hunting 2016, in Paris, France, " Higgs Hunting 2016 Theory Summary Talk"
July, 2016	The 24rd International Conference on Supersymmetry and Unification of Fundamental Interactions (SUSY 2016), in Melbourne, Australia, "Extended Higgs sectors an the alignment limit"
June–July, 2016	Pre-SUSY 2016, preceding the 24th International Conference on Supersymmetry and Unification of Fundamental Interactions, University of Melbourne, Melbourne, Australia, "SM and SUSY Higgs" (three lectures)
June, 2016	2016 Theoretical Advanced Study Institute (TASI 2016), University of Colorado, Bolder, CO, "Supersymmetric Theories and Models" (four lectures)
August, 2015	The 23rd International Conference on Supersymmetry and Unification of Fundamental Interactions (SUSY 2015), at Granlibakken Conference Center, Tahoe City, CA, "Partially Natural Two Higgs Doublet Models"
May, 2015	Third KUTS Workshop, LPTHE, Paris, France, "The Alignment Limit of the MSSM Higgs sector–the Impact of Radiative Corrections"
April, 2015	The 4th MCTP Spring Symposium on Higgs Boson Physics in the Standard Model and Beyond, Ann Arbor, MI, "Partially Natural Two Higgs Doublet Models"
February, 2015	The 2nd Toyama International Workshop on Higgs as a Probe of New Physics 2015 (HPNP2015), Toyama, Japan, "Constraints on the alignment limit of the MSSM Higgs sector"
January, 2015	SID Workshop, SLAC, Stanford, CA, "Higgs Physics and the ILC"
September, 2014	IFT Program on Physics Challenges in the face of LHC-14, Madrid, Spain, "Constraints on the alignment limit of the MSSM Higgs sector"

September, 2014	IFT Program on Physics Challenges in the face of LHC-14, Madrid, Spain, "Motivations for a stable scalar in an extended Higgs sector"
September, 2014	Higgs Days at Santander 2014, Santander, Spain, "2HDM Benchmarks—Theoretical Framework"
September, 2014	3rd Workshop on Multi-Higgs Models, Lisbon, Portugal, "Constraints on the alignment limit of the MSSM Higgs sector"
July, 2014	22nd International Conference on Supersymmetry and Unification of Fundamental Interactions (SUSY 2014), Manchester, UK, "Can the $Hb\bar{b}$ coupling be equal in magnitude to its SM value but opposite in sign?"
June, 2014	Workshop of the LHC Higgs Cross Section Working Group, CERN "2HDM—Report on recent activities"
May, 2014	Americas Workshop on Linear Colliders (AWLC14), Fermilab, "Probing wrong-sign Yukawa couplings"
May, 2014	Americas Workshop on Linear Colliders (AWLC14), Fermilab, "Higgs Physics"
April, 2014	Precision SUSY Higgs Mass Calculation Initiative, KUTS Workshop I, MPI, Munich, Germany, "Some Issues for Precision Higgs Mass Computations"
March, 2014	Gunion Fest, Davis, CA, "Precision Higgs and Future Colliders"
March, 2014	Bay Area Particle Physics Seminar, San Francisco, CA, "Decoupling and Alignment in Light of the Higgs Data"
November, 2013	2013 International Workshop on Future Linear Colliders (LCWS 2013), Tokyo, Japan, "Higgs/EWSB Working Group Summary"
November, 2013	2013 Inter-Academy Seoul Science Forum, Seoul, South Korea, "The Higgs Boson: Past, Present and Future"
September, 2013	Higgs Days at Santander 2013, Santander, Spain, "2HDM Theory and a strategy for benchmarks"
September, 2013	Scalars 2013, Warsaw, Poland, "Higgs Physics at the ILC"
July, 2013	Higgs Hunting 2013, Orsay, France, "Higgs physics–approaching the decoupling limit"
July, 2013	LHC–The First Part of the Journey, Kavli Institute for Theoretical Physics, University of California, Santa Barbara, "Decoupling and the MSSM Higgs Mass" "
July, 2013	Snowmass Energy Frontier Workshop, University of Washington, Seattle, WA, "BSM Higgs Physics at the ILC"
June, 2013	PDG Workshop on Searches, Lawrence Berkeley National Laboratory, Berkeley, CA, "Supersymmetry Theory Review"
May, 2013	Planck 2013: *From the Planck scale to the electroweak scale*, Bonn, Germany, "The MSSM Higgs Mass Revisited"
April, 2013	The LHC Higgs Signal: Characterization, Interpretation and BSM Model Implications, Davis, CA, "2HDM Benchmarks for LHC Higgs Studies"
March, 2013	Aspen 2013 Winter Conference–*Higgs Quo Vadis*, Aspen Center for Physics, Aspen, CO, "A Higgs Hunter's Perspective"

February, 2013	Higgs as a Probe of New Physics 2013 (HPNP2013), University of Toyama, Japan, "Alternative futures for the Higgs data: are we approaching or receding from the decoupling limit?"
January, 2013	The Higgs Symposium, The Higgs Centre for Theoretical Physics, University of Edinburgh, "A Higgs Hunter's Perspective"
December, 2012	KITP Miniprogram: Higgs Identification, Kavli Institute for Theoretical Physics, University of California, Santa Barbara, "Workshop Summary: Revisiting the Higgs Wishlist"
December, 2012	West Coast LHC Theory Meeting: Higgs and More at the LHC, University of California, Riverside, "Mass-Degenerate-Higgs Hunters Explore the Two-Higgs-Doublet Model"
October, 2012	ATLAS Analysis Jamboree on Higgs Searches, Berkeley, CA, "The Two-Higgs Doublet Model in Theory and Practice"
September, 2012	Higgs Days at Santander 2012, IFCA (Instituto de Fisica de Cantabria), Santander, Cantabria, Spain, "Degenerate Higgs hunters and the $\gamma\gamma$ excess"
September, 2012	Higgs Days at Santander 2012, IFCA (Instituto de Fisica de Cantabria), Santander, Cantabria, Spain, "Higgs boson couplings near the decoupling limit"
August, 2012	Workshop on Multi-Higgs Models, Complexo Interdisciplinar da UL, Lisbon, Portugal, "Necessary Conditions for Spontaneous CP Violation"
July, 2012	40th SLAC Summer Institute, *The Electroweak Scale: Unraveling the Mysteries at the LHC*, "EWSB Basics"
July, 2012	LHC Theory Workshop, University of Melbourne, "What can the LHC Higgs data teach us about the Two-Higgs-Doublet Model?"
May, 2012	The Next Stretch of the Higgs Magnificent Mile Workshop, Northwestern University, Chicago campus, "Theoretical motivations for a Higgs factory"
December, 2011	Annual United Kingdom Theory Meeting, IPPP, University of Durham, "Higgs and SUSY"
October, 2011	Berkeley workshop on searches for supersymmetry at the LHC, "Theoretical Aspects of Higgs Physics"
September, 2011	International Workshop on Future Linear Colliders (LCWS11), "A Framework for Precision 2HDM studies at the ILC/CLIC"
September, 2011	IDPASC Higgs School, Foz do Arelho, Portugal, "Extending the Standard Model Higgs Sector: Two Higgs doublets and the MSSM" (2 lectures)
September, 2011	19th International Conference on Supersymmetry and Unification of Fundamental Interactions (SUSY-11), Fermilab, "Higgs: where are we now?"
August, 2011	Scalars 2011 Conference, Warsaw, Poland, "Basis independent methods for the Two-Higgs Doublet Model"
August, 2011	CERN TH-LPCC Summer Institute on LHC Physics, "SUSY Monojets and Precision Coupling Determinations"
May, 2011	Implications of EWSB Workshop, University of Wisconsin at Madison, "What's so special about the MSSM Higgs sector?"

December, 2010	4th Annual Workshop of the Helmholtz Alliance "Physics at the Terascale," Dresden, Germany, "Status and prospects for a Higgs boson discovery"
October, 2010	Higgs Days at Santander 2010, Santander, Spain, "An Introduction to Higgs Boson Theory"
October, 2010	2nd Bethe Center Workshop: Cosmology meets Particle Physics Bad Honnef, Germany, "Prospects for Higgs Physics at the LHC"
August, 2010	The Pre-18th International Conference on Supersymmetry and Unification of Fundamental Interactions, Bonn, Germany, "Two-component Spinor Formalism: practical methods for treating Majorana fermions"
July, 2010	PASCOS-2010, Valencia, Spain, "Higgs Phenomenology at the LHC"
May, 2010	MCTP Symposium on Higgs Boson Physics, "Custodial Symmetry Breaking in the two Higgs doublet model"
January, 2010	Zurich conference in celebration of Daniel Wyler's 60th birthday: The New, the Rare and the Beautiful, "Radiative Neutralino Decay—21 Years Later"
January, 2010	Nordic Conference in Particle Physics, Spaatind, Norway, "Two-component Spinor Formalism: practical methods for treating Majorana fermions"
January, 2010	Nordic Conference in Particle Physics, Spaatind, Norway, "Introduction to Electroweak Symmetry Breaking" (2 lectures)
September, 2009	DESY Theory Workshop, "Electroweak Symmetry Breaking"
September, 2009	Workshop on Multi-Higgs Models, Lisbon, Portugal, "Custodial Symmetry Breaking in the Two-Higgs-Doublet Model"
August, 2009	CERN Theory Institute, "The Pseudo-Nambu Goldstone Boson of Metastable SUSY-Violation"
June, 2009	The 17th International Conference on Supersymmetry and the Unification of Fundamental Interactions (SUSY-09), "The Pseudo-Nambu Goldstone Boson of Metastable SUSY-Violation"
April, 2009	International Workshop on Supersymmetry and Supersymmetry Breaking, IPPP, Durham, England, "The Pseudo-Nambu Goldstone Boson of Metastable SUSY-Violation"
October, 2008	Augusto Barroso Fest, Lisbon, Portugal, "The Two-Higgs-Doublet Model: Past, Present and Future"
May, 2008	PLANCK-08 meeting: from the Planck scale to the electroweak scale, "The Wrong-Higgs Couplings of the MSSM"
October, 2007	American Linear Collider Physics Group (ALCPG) Workshop 2007, "The ILC Physics Menu—500 GeV and 1 TeV"
August, 2007	CERN Theory BSM Institute, New Physics and the LHC, "Sneutrino mixing phenomena in the seesaw-extended MSSM"
April, 2007	Workshop on the LHC Early Phase for the ILC, Fermilab, "Report of the Higgs Working Group"
January, 2007	Kane Symposium (in honor of Gordon Kane's 70th Birthday), "The Two Higgs Doublet Model: Past, Present and Future"
August, 2006	Particle Theory in Anticipation of the LHC—a workshop at the Aspen Center for Physics, Aspen, CO, "Two-Higgs Physics at Future Colliders"

July, 2006	Vancouver Linear Collider Workshop (VLCW-06), University of British Columbia, Vancouver, BC Canada, "A Model Independent Approach to Two-Higgs Doublet Model Physics"
July, 2005	The Pre-13th International Conference on Supersymmetry and Unification of Fundamental Interactions, IPPP, Durham, England, "Practical methods for treating Majorana fermions"
May, 2005	Frontiers in Contemporary Physics III, Vanderbilt University, Nashville, TN, "Linear Collider Physics: Theory and Phenomenology" (2 lectures)
March, 2005	3rd Workshop on CP Studies and Non-Standard Higgs Physics (CPNSH), SLAC, Stanford, CA, "Basis-Independent Description of CP-Violation in the Two-Higgs-Doublet Model"
February, 2005	Aspen Winter Conference: The Highest Energy Physics, Aspen, CO, "Opportunities for Discovery at the International Linear Collider (ILC)"
August, 2004	Paul Scherrer Institute Zuoz Summer School on Particle Physics, Zuoz, Switzerland, "Introduction to Supersymmetry" (5 lectures)
June, 2004	Theoretical Advanced Study Institute, Boulder, CO, "Practical Supersymmetry: Four Introductory Lectures" (4 lectures)
May, 2004	PLANCK-04, The 7th European Meeting on Physics From the Planck Scale to the Electroweak Scale, "A New Look at the Two-Higgs-Doublet Model"
April, 2004	International Conference on Linear Colliders LCWS-04, Paris, France, "Higgs Theory–A Brief Overview"
January, 2004	ALCPG 2004 Winter Workshop, SLAC, "Higgs Working Group Summary"
October, 2003	Second Workshop on the Discovery Potential of an Asymmetric B Factory at 10^{36} Luminosity, SLAC, "Exploring Supersymmetry with Precision B Physics"
May, 2003	2003 PHENO Symposium, Madison, WI, "PHENO-2003 Conference Summary"
February, 2003	LHC/LC Study Group Meeting, CERN, "The approach to the decoupling limit in Two-Higgs-Doublet Models"
September, 2002	6th International Symposium on Radiative Corrections: Application of Quantum Field Theory to Phenomenology (RADCOR-2002) and 6th Zeuthen Workshop on Elementary Particle Theory: Loops and Legs 2002, Kloster Banz, Germany, "Decoupling and the radiatively-corrected MSSM Higgs sector"
September, 2002	Summer School for High Energy Physics, Maria Laach, Eifel, Germany, "Higgs Physics" (four lectures)
June, 2002	10th International Conference on Supersymmetries in Physics (SUSY-02), "Higgs theory and phenomenology in the Standard Model and MSSM"
January, 2002	The 18th International Workshop on Weak Interactions and Neutrinos (WIN-02), "MSSM Higgs Phenomenology in the Decoupling Limit"
July, 2001	Workshop on the Future of High Energy Physics (Snowmass 2001) "Introduction to Electroweak Symmetry Breaking"
June, 2001	ICTP Summer School in High Energy Physics and Cosmology, Trieste, Italy, "Introduction to Supersymmetry" (four lectures)

May, 2001	IPPP Conference on Phenomenology of Beyond the Standard Model, Durham, England, "Precision Higgs Physics"
October, 2000	International Symposium Celebrating 30 Years of Supersymmetry, Minneapolis, Minnesota, "Low-energy supersymmetry and its phenomenology"
June, 2000	8th International Conference on Supersymmetries in Physics (SUSY-2K), CERN, "Neutrino and Sneutrino Masses and Mixing in R-Parity-Violating Supersymmetry"
March, 2000	LBL Linear Collider Workshop, Berkeley, "Higgs Physics at Future Colliders: Summary and Issues for the Future"
June, 1999	7th International Conference on Supersymmetries in Physics (SUSY 99), Fermilab, "Theory and phenomenology of the MSSM Higgs sector at the upgraded Tevatron"
April, 1999	Phenomenology for the Third Millennium (Pheno '99 Symposium), University of Wisconsin, "Recent Developments in Higgs Physics"
November, 1998	Physics at Run II: Workshop on Supersymmetry/Higgs Summary Meeting, Fermilab, "Higgs Working Group Report I"
September, 1998	4th International Symposium on Radiative Corrections (RADCOR 98), Universitat Autónoma de Barcelona, "How well can we predict the mass of the Higgs Boson of the Minimal Supersymmetric Model?"
July, 1998	6th International Conference on Supersymmetries in Physics (SUSY 98), Oxford University, "(S)neutrino Masses and Mixing in Low-Energy Supersymmetry"
May, 1998	First European Meeting *From the Planck Scale to the Electroweak Scale*, Kazimierz, Poland, "Higgs Physics at the Tevatron"
May, 1998	General Meeting of the Supersymmetry/Higgs Physics at the Tevatron Run-II Workshop, "Report of the Higgs Group"
November, 1997	Workshop on Physics at the First Muon Collider, Fermilab, "The Higgs Sector of Low-Energy Supersymmetry"
September, 1997	2nd International Workshop on Electron-Electron Interactions at TeV Energies (e^-e^- 97), "Higgs Physics at e^-e^- Colliders"
June, 1997	ICTP Summer School in High Energy Physics and Cosmology, Trieste, Italy, "The Standard Model—Four Introductory Lectures" (four lectures)
May, 1997	5th International Conference on Supersymmetries in Physics (SUSY 97), "The Status of the Minimal Supersymmetric Standard Model and Beyond"
April, 1997	3rd Warsaw Workshop on Physics from the Planck Scale to the Electroweak Scale, Warsaw, Poland, "Sneutrino Mixing Phenomena"
December, 1996	Rutherford Laboratory Christmas Meeting, "Review of Higgs Physics and Phenomenology"
December, 1996	Ringberg Workshop on the Higgs Puzzle–What can We Learn from LEP2, LHC, NLC, and FMC?, "Future Directions in Higgs Phenomenology"
July, 1996	Snowmass Workshop on New Directions for High Energy Physics, "Light Higgs Working Group Summary"

December, 1995	Workshop on Supersymmetric Phenomena and Supersymmetric Grand Unified Theories, Institute for Theoretical Physics, Santa Barbara, "Low-Energy Supersymmetry, Precision Electroweak Data, and the Top Quark Mass"
September, 1995	Workshop on Unification, Gran Sasso Laboratory, Italy, "A Four-Generation Low-Energy Supersymmetric Model with a Light Top Quark Mass"
July, 1995	European Physical Society Meeting, Brussels, Belgium, "Supersymmetric Hints from Precision Electroweak Data?"
July, 1995	European Physical Society Meeting, Brussels, Belgium, "Recent Refinements in Higgs Physics"
June, 1995	Workshop on Particle Physics, Valencia, Spain, "Challenges for Low-Energy Supersymmetry"
June, 1995	Workshop on Physics at Future e^+e^- Linear Colliders, Gran Sasso Laboratory, Italy, "Physics Beyond the Standard Model at Future Colliders"
March, 1995	German Physical Society Meeting, Karlsruhe, Germany, "Physics Beyond the Standard Model"
March, 1995	XXXth Rencontres de Moriond: Electroweak Interactions and Unified Theories, "Is $m_t \approx m_W$ Ruled Out?"
February, 1995	Workshop on Electroweak Physics, Ringberg Castle, Germany, "The Challenge of the Non-Minimal Higgs Sector for Future e^+e^- Colliders"
December, 1994	Beyond the Standard Model IV Workshop, Granlibakken, Lake Tahoe, CA, "Quest for the Non-Minimal Higgs Sector"
September, 1994	Supersymmetry Workshop, DESY, Hamburg, Germany, "The MSSM Higgs Sector—Can We Distinguish it from the Standard Model"
September, 1994	Workshop on Supersymmetry, Institute for Theoretical Physics, University of Warsaw, Poland, "If the Higgs Sector is Non-Minimal, How Will We Know?"
August, 1994	Report on the DPF Long Range Planning Study, DPF Meeting, Albuquerque, NM, "Electroweak Symmetry Breaking and Beyond the Standard Model"
July, 1994	Workshop on Electroweak Physics, Eötvös University, Budapest, Hungary, "Decoupling of the Non-Minimal Higgs Sector and Implications for Future Searches"
July, 1994	Eötvös Summer School Graduate Courses, Eötvös University, Budapest, Hungary, "The Physics of Electroweak Symmetry Breaking" (three lectures)
August, 1993	XXI SLAC Summer Institute on Particle Physics, Stanford, CA, "Spin Structure at Future High-Energy Colliders" (three lectures)
April, 1993	Workshop on Recent Advances in the Superworld, Houston, TX, "Low-Energy Supersymmetric Basics" (or "The Supersymmetric Top-Ten Lists")
March, 1993	SUSY-93 Workshop, Boston, MA, "Phenomenology of Gluino Searches at the Tevatron"
October, 1992	23rd Workshop of the INFN Eloisatron Project—The Decay Properties of Supersymmetric Particles, Erice (Trapani), Italy, "The Higgs Sector in the Minimal Supersymmetric Model"

June, 1992	Theoretical Advanced Study Institute, Boulder, CO, "Three Lectures on Low-Energy Supersymmetry"
April, 1992	The SSC Physics Symposium, Madison, WI, "Radiatively-Corrected Higgs Sector of the Minimal Supersymmetric Model"
January, 1992	Aspen Winter Conference in Elementary Particle Physics, "Effects of Radiative Corrections to the Higgs Sector of the Minimal Supersymmetric Model"
November, 1991	International Workshop on Electroweak Symmetry Breaking, Hiroshima, Japan, "The Higgs Sector in the Minimal Supersymmetric Model: Radiative Corrections and Their Implications"
September, 1991	Workshop of Physics and Experiments with Linear Colliders, Saariselkä, Finland, "Higgs Theory and Phenomenology at Future e^+e^- Linear Colliders"
February, 1991	Workshop on Precision Electroweak Measurements, Institute for Theoretical Physics, Santa Barbara, CA, "Supersymmetry Effects on Electroweak Predictions"
August, 1990	Mt. Sorak Symposium on Theoretical Physics, South Korea, "Two Lectures on Higgs Physics"
June, 1990	Theoretical Advanced Study Institute, Boulder, CO, "Six Lectures on Electroweak Symmetry Breaking"
March, 1990	Workshop on Thinking About the Top Quark, Institute for Theoretical Physics, Santa Barbara, CA, "Implications of a Large Top Quark Mass for Higgs Boson Phenomenology"
July, 1989	8th INFN Eloisatron Project Workshop—Higgs Particles: Physics Issues and Experimental Searches in High Energy Collisions, Erice, Italy, "Nonminimal Higgs Bosons: Theory and Phenomenology"
May, 1989	Workshop on the Tau-Charm Factory, SLAC, "Can the Higgs Sector be Probed in Tau-Decay?"
January, 1989	Workshop on High Energy Physics Phenomenology, Bombay, India, "Minimal and Nonminimal Higgs Bosons: Two Introductory Lectures", and "Higgs Boson Hunting: Report of the Higgs Boson Working Group"
July, 1988	Conference on Phenomenology in High Energy Physics, Trieste, Italy, "Supersymmetry Signals at Present and Future Colliders"
June, 1987	European Physical Society Meeting, Uppsala, Sweden, "Search for Supersymmetry at Future Colliders"
May, 1986	Madison Workshop on Physics Simulations at High Energy, "Distribution of Heavy Particles in the Proton"
August, 1985	Oregon Workshop on Super High Energy Physics, "Beyond the Standard Model at the SSC"
June, 1985	Workshop on Tests of Electroweak Theories, Trieste, Italy, "Signatures of Supersymmetry at the CERN Collider"
May, 1985	Madison Workshop on New Particles, "Signatures of Supersymmetry at the CERN Collider"
November, 1984	Annual Meeting of the Division of Particles and Fields of the American Physical Society, Santa Fe, NM, "Implications for Supersymmetry of the CERN Monojets"

June-July, 1984	Snowmass Workshop on the Superconducting Supercollider, "Report of the New W's and Z's Working Group"
August, 1983	Gordon Conference, "New Trends in Electroweak Physics"
March, 1982	Rencontres de Moriond, "Are Supersymmetry and Grand Unification Compatible?"

Outside Committees and Consulting

2015–present	Member of the International Advisory Committee of the Higgs Hunting Conference, Orsay/Paris, France
2013–present	Member of the International Advisory Committee of the International Workshop on Higgs as a Probe of New Physics (HPNP)
2013–present	Honorary Member, Aspen Center for Physics
2011–present	Member of the Program Committee of the Scalars Conference, Warsaw, Poland
2009–present	Member, International Advisory Committee, Workshop on Multi-Higgs Models, Lisbon, Portugal
2007–present	Member of the Particle Data Group
1997–2025	Member of the Board of Editors, *European Physical Journal C*
2022–2023	Member of the Committee of Visitors (COV) for the Division of Physics at the National Science Foundation
2022	Member of the Aspen Center for Physics Admissions Committee
2021	Mail-in reviewer for research grant proposals to the FY2021 Department of Energy Comparative Review of the University HEP Theory Program
2019	Member, National Science Foundation High Energy Physics Theory and Cosmology Panel
2001–2019	Member of the International Advisory Board of the International Symposium on Radiative Corrections (RADCOR)
2018	Mail-in reviewer for theoretical HEP proposals to the FY2018 DOE Office of Science Early Career Research Program
2018	Member of the Aspen Center for Physics Presidential Search Committee
2017	Member of the American Physical Society J.J. Sakurai Prize Selection Committee
2016–2017	Member of the Division of Particles and Fields Mentoring Award Selection Committee
2016	Chair of the Aspen Center for Physics Presidential Search Committee
2015–2018	Member of the Advisory Committee to the Fermilab Distinguished Scholars Program (FDSP)
2015	Member of the Advisory Committee to HEPAP to formulate a charge to the Subcommittee on Respective Roles and Responsibilities (RR&R)
2015	Member, Department of Energy FY16 University Theory Program Comparative Review Panel
2015	Member, National Science Foundation High Energy Physics Theory and Cosmology Panel

2014	Member, Department of Energy FY15 University Theory Program Comparative Review Panel
2014	Member of the P5 Rollout Campaign Committee
2013–2018	Member of the Dean's Advisory Committee to evaluate the Laboratory for Nuclear Science at MIT
2013–2015	Elected Secretary/Treasurer of the Division of Particles and Fields of the American Physical Society
2013	Member, Colloquium Committee, Aspen Center for Physics
2011–2012	Member, Admissions Committee, Aspen Center for Physics
2011	Member, Program Committee for the International Workshop on Future Linear Colliders (LCWS11)
2011	Member, International Advisory Committee for the SUSY 2011 Conference
2010–2011	Member, Executive Committee of the Trustees, Aspen Center for Physics
2010	Member, Local Organizing Committee for the SUSY-10 Conference
2010	Member, National Science Foundation High Energy Physics Theory and Cosmology Panel
2009–2010	Member, Program Committee, Aspen Center for Physics
2008–2009	Member, Nominations Committee, Aspen Center for Physics
2007–2008	Member, Program Committee, Aspen Center for Physics
2007	Member, Program Committee, American Linear Collider Physics Group Workshop 2007 (ALCPG07)
2007	Candidate for Vice-Chair of the Division of Particles and Fields
2006–2008	Member, Admissions Committee, Aspen Center for Physics
2006–2008	Member, Nominations Committee, Aspen Center for Physics
2006–2007	Member, Admissions Committee, Aspen Center for Physics
2005–2011	Trustee, Aspen Center for Physics
2006	Member, Department of Energy Panel to Review Outstanding Junior Investigator (OJI) grants in particle physics
2006	Chair of the American Physical Society J.J. Sakurai Prize Selection Committee
2005–2010	Member, Finance Committee, Aspen Center for Physics
2005–2006	Member, Program Committee, Aspen Center for Physics
2005	Vice-chair of the American Physical Society J.J. Sakurai Prize Selection Committee
2004–2005	Member, Nominations Committee, Aspen Center for Physics
2002–2004	Member, Editorial Board of Physical Review D
2002–2004	elected Member, Executive Committee of the Division of Particles and Fields of the American Physical Society
2004	Chair, Program Committee, Aspen Center for Physics
2004	Member, Admissions Committee, Aspen Center for Physics
2003	Chair, Public Lecture Series Committee, Aspen Center for Physics
2003	Member, Program Committee, Aspen Center for Physics

2001–2002	Member, International Scientific Advisory Committee for the SUSY-07 Conference
2001–2002	Member, Tenure Review Committee, Stanford Linear Accelerator Center
2001	Member, NSF Panel to Review Theoretical Physics Grants
2000–2001	Member, Computer Committee, Aspen Center for Physics
2000–2001	Member, Faculty Search Committee, Stanford Linear Accelerator Center
1999	Chair, Nominations Committee, Aspen Center for Physics
1998–2001	Member, Finance Committee, Aspen Center for Physics
1998–2001	Corporate Secretary, Aspen Center for Physics
1997–1998	Aspen Winter Conference Committee, Aspen Center for Physics
1996–2000	Member, SLAC Experimental Program Advisory Committee
1996–1997	Scientific Secretary, Aspen Center for Physics
1995–1996	Assistant Scientific Secretary, Aspen Center for Physics
1994–1997	Member, Board of Editors, *Zeitschrift für Physik C*
1994–1995	Aspen Winter Conference Committee, Aspen Center for Physics
1993–1995	Computing Committee, Aspen Center for Physics
1993–2013	General Member, Aspen Center for Physics
1992–2006	Outside consultant to the Particle Data Group
1989–1992	Divisional Associate Editor of *Physical Review Letters*
December, 1989	Member of a National Science Foundation Panel to select recipients of the Presidential Young Investigator Awards in Physics

Visiting Appointments

November, 2025	Center for Cosmology and Particle Physics, New York University
June–July, 2025	Aspen Center for Physics
June, 2025	Munich Institute for Astro-, Particle and BioPhysics (MIAPbP)
May, 2025	Bethe Center for Theoretical Physics, Bonn
May, 2025	Center for Cosmology and Particle Physics, New York University
April, 2025	Dublin Institute for Advanced Study, Dublin, Ireland
January, 2025	Kavli Institute for Theoretical Physics, Santa Barbara
October, 2024	Bethe Center for Theoretical Physics, Bonn
October, 2024	Center for Cosmology and Particle Physics, New York University
September, 2024	Instituto Superior Técnico in Lisbon, Portugal
July, 2024	Aspen Center for Physics
June, 2024	CERN Theory Group
July-August, 2023	Department of Applied Mathematics and Theoretical Physics, University of Cambridge
July, 2023	Instituto Superior Técnico in Lisbon, Portugal
June, 2023	Aspen Center for Physics

August, 2022	Aspen Center for Physics
July–August, 2021	Aspen Center for Physics
March, 2020	Center for Cosmology and Particle Physics, New York University
Feb.–March, 2020	Bethe Center for Theoretical Physics, Bonn
August–Sept., 2019	Aspen Center for Physics
July–August, 2019	Department of Applied Mathematics and Theoretical Physics, University of Cambridge
June, 2019	Instituto Superior Técnico in Lisbon, Portugal
June, 2019	Munich Institute for Astro- and Particle Physics (MIAPP)
Nov.–Dec., 2018	Bethe Center for Theoretical Physics, Bonn
August–Oct., 2018	Galileo Galilei Institute for Theoretical Physics, Florence
July–August, 2018	Aspen Center for Physics
July, 2018	CERN Theory Group
May, 2018	Bethe Center for Theoretical Physics, Bonn
September, 2017	Galileo Galilei Institute for Theoretical Physics, Florence
August–Sept., 2017	Bethe Center for Theoretical Physics, Bonn
July–August, 2017	Aspen Center for Physics
December, 2016	Helsinki Institute of Physics
August, 2016	Aspen Center for Physics
July–August, 2016	CERN Theory Group
July, 2016	Bethe Center for Theoretical Physics, Bonn
March–June, 2016	Kavli Institute for Theoretical Physics, Santa Barbara
September, 2015	Galileo Galilei Institute for Theoretical Physics, Florence
July–August, 2015	Aspen Center for Physics
July, 2015	CERN Theory Group
June, 2015	Bethe Center for Theoretical Physics, Bonn
September, 2014	Bethe Center for Theoretical Physics, Bonn
August, 2014	Aspen Center for Physics
July, 2014	Mainz Institute for Theoretical Physics (MITP), Mainz
June, 2014	Bethe Center for Theoretical Physics, Bonn
Jan.–June, 2014	Lawrence Berkeley National Laboratory, Theoretical Physics Group and Particle Data Group
Sept.–Dec., 2013	Lawrence Berkeley National Laboratory, Particle Data Group
September, 2013	Bethe Center for Theoretical Physics, Bonn
August, 2013	Aspen Center for Physics
December, 2012	Kavli Institute for Theoretical Physics, Santa Barbara
September, 2012	Bethe Center for Theoretical Physics, Bonn
August, 2012	Aspen Center for Physics
September, 2011	Bethe Center for Theoretical Physics, Bonn

August, 2011	CERN Theory Group
June–July, 2011	Aspen Center for Physics
Aug.–Dec., 2010	Bethe Center for Theoretical Physics, Bonn
June–July, 2010	Aspen Center for Physics
September, 2009	Bethe Center for Theoretical Physics, Bonn
August, 2009	CERN Theory Group
July, 2009	Aspen Center for Physics
November, 2008	Bethe Center for Theoretical Physics, Bonn
July–August, 2008	Aspen Center for Physics
June–July, 2008	Rheinische Friedrich-Wilhelms-Universität Bonn
March–April, 2008	Kavli Institute for Theoretical Physics, Santa Barbara
August, 2007	CERN Theory Group
July, 2007	Aspen Center for Physics
Sept.–Nov., 2006	Rheinische Friedrich-Wilhelms-Universität Bonn
August, 2006	Aspen Center for Physics
March, 2006	Rheinische Friedrich-Wilhelms-Universität Bonn
August, 2005	Aspen Center for Physics
July, 2005	IPPP, Durham, England
June, 2005	Rheinische Friedrich-Wilhelms-Universität Bonn
August, 2004	CERN Theory Group
June–July, 2004	Aspen Center for Physics
June–July, 2003	Aspen Center for Physics
Jan.–March, 2003	Institute for Particle Physics Phenomenology (IPPP), Durham, England
September, 2002	Rheinische Friedrich-Wilhelms-Universität Bonn
July–August, 2002	Aspen Center for Physics
June–July, 2002	CERN Theory Group
July, 2001	Aspen Center for Physics
June, 2001	Universidad Autónoma de Madrid
Feb.–Apr., 2001	Oxford University
Jan.–Feb., 2001	Rheinische Friedrich-Wilhelms-Universität Bonn
August, 2000	Aspen Center for Physics
July, 2000	CERN Theory Group
September, 1999	Rutherford Laboratory Theory Group
Aug.–Sept., 1999	CERN Theory Group
July, 1999	Aspen Center for Physics
Sept.–Dec., 1998	Fermilab Theory Group
August, 1998	CERN Theory Group
July, 1998	Rutherford Laboratory Theory Group
August, 1997	Aspen Center for Physics

June–July, 1997	CERN Theory Group
March, 1997	Consejo Superior de Investigaciones Científicas, Madrid
September, 1996	Max-Planck-Institut für Physik, Munich
August, 1996	CERN Theory Group
June–July, 1996	Aspen Center for Physics
September, 1995	Institute for Theoretical Physics, Univ. of California, Santa Barbara
April, 1995	Weizmann Institute, Rehovot, Israel
Jan.–Sept., 1995	Scientific Associate, CERN Theory Group
August, 1994	Aspen Center for Physics
Jan.–March, 1994	Institute for Theoretical Physics, Univ. of California, Santa Barbara
July, 1993	Aspen Center for Physics
July, 1992	Aspen Center for Physics
July–August, 1991	Aspen Center for Physics
September, 1990	CERN Theory Group
July, 1990	Aspen Center for Physics
March, 1990	Institute for Theoretical Physics, Univ. of California, Santa Barbara
August, 1989	Aspen Center for Physics
September, 1988	Laboratoire de Physique Mathématique, Université des Sciences et Techniques du Languedoc, Montpellier, France
May, 1988	Institute for Theoretical Physics, Univ. of California, Santa Barbara
June, 1987	Theoretische Physik, ETH Hönggerberg, Zurich, Switzerland
April–July, 1985	University of Oregon
1982–present	Visiting Physicist, Theory Group, Stanford Linear Accelerator Center

Panels and Working Groups

2017	co-convener of the Higgs/EW/BSM session of the Americas Workshop on Linear Colliders 2017 (AWLC2017)
2015–2016	co-convener of the Higgs session of the KITP workshop, "Experimental Challenges for the LHC Run II"
2014	co-convener of the Higgs/Electroweak Symmetry Breaking Working Group, Americas Workshop on Linear Colliders (AWLC14)
2014	founding member of the Precision SUSY Higgs Mass Calculation Initiative
2013	co-convener of the Higgs/EWSB Working Group, International Conference on Future Linear Colliders (LCWS-13)
2007	co-convener of the Higgs Working Group for the Workshop on "The LHC early phase for the ILC"
2005–2006	co-convener of the CP violation in 2HDM working group, Workshop on CP Studies and Non-Standard Higgs Physics (CPNSH)
April, 2004	co-convener of the Higgs and Electroweak Symmetry Breaking Working Group, International Conference on Future Linear Colliders (LCWS-04)
2003–2004	co-editor of the LHC/ILC Study Group

2000–2004	co-convener of the Higgs Working Group, American Linear Collider Physics Group
July, 2001	co-convener of the Snowmass 2001 Working Group on Electroweak Symmetry Breaking
October, 1998	co-convener of the "Is it really top? Is it only top?" Discussion Group, Top-Quark Physics for Tevatron Run II Thinkshop
March–Dec., 1998	co-convener of the Higgs Working Group, Tevatron Run II Workshop
June–July, 1996	co-convener of the Light Higgs Boson Working Group, Snowmass Workshop on New Directions for High Energy Physics
1995	co-convener of the Higgs Boson Working Group, European Workshop on Future e^+e^- Linear Colliders
1994–1995	co-convener of the *Electroweak Symmetry Breaking and Beyond the Standard Model Working Group*, for the DPF Long Range Planning Study
1990–1991	member of SLAC working group on the Next Linear Collider
January, 1989	co-leader of *Higgs Boson Working Group* at the Workshop on High Energy Physics Phenomenology, Tata Institute for Fundamental Research, Bombay, India
1987–1988	member of SLAC panel studying Opportunities and Requirements for Experimentation at a Very High-Energy e^+e^- Collider
July, 1987	co-leader of *Non-minimal Higgs Boson Working Group* at the 1987 Berkeley Workshop on the SSC
March–Aug., 1985	leader of *Beyond the Standard Model Working Group* at the 1985 Oregon Workshop on Supercollider Physics
June–July, 1984	leader of *New W's and Z's Working Group* at the 1984 Snowmass Workshop on the SSC

Conferences and Workshops Organized

2024–2025	Co-Chair of the 32nd International Conference on Supersymmetry and Unification of Fundamental Interactions: Theory meets Experiment (SUSY 2025), at UC Santa Cruz
2024–2025	Co-Chair of the Pre-SUSY 2025 Symposium on Supersymmetry and Unification of Fundamental Interactions at UC Santa Cruz
2022–2023	Chair of the Organizing Committee of the Marcela–Carlos Fest, a symposium in honor of the 60th birthdays of Marcela Carena and Carlos Wagner, to be held at the University of Chicago and Fermilab, May 28–30, 2023
2022–2023	Co-organizer of the Herbi Fest, a symposium in honor of the 60th birthday of Herbi Dreiner, to be held at the Bethe Center for Theoretical Physics in Bonn, Germany, March 27–28, 2023
2015	Chairman of the Pre-SUSY 2015 Symposium on Supersymmetry and Unification of Fundamental Interactions at UC Davis
2015	Chairman of the SCIPP Reunion Theory Symposium
2014–2015	Member of the Local Organizing Committee of the 23rd International Conference on Supersymmetry and the Unification of Fundamental Interactions (SUSY 2015)

2014	co-convener of the Higgs Physics parallel sessions of the 37th International Conference on High Energy Physics (ICHEP-2014)
August, 2013	Aspen Center for Physics, co-organizer of the Workshop on Implications of LHC Higgs-Like Signals
2013	Member, Local Organizing Committee, Meeting of the Division of Particles and Fields of the American Physical Society (DPF 2013)
2012	co-organizer of Higgs Identification, KITP Rapid Response workshop, December 10–21, 2012 in Santa Barbara, CA
2011	Member, Program Committee for the International Workshop on Future Linear Colliders (LCWS11)
2010	Member, Local Organizing Committee of the 18th International Conference on Supersymmetry and the Unification of Fundamental Interactions (SUSY 2010)
2010	Chairman, West Coast LHC Theory meeting at UCSC, May 21, 2010
2007	Member, Program Committee, American Linear Collider Physics Group Workshop 2007 (ALCPG07)
January, 2007	Co-organizer of the Kane Symposium (in honor of Gordon Kane's 70th Birthday), University of Michigan, Ann Arbor, MI, 19–20 January 2007
2006–2007	Member, Program Committee, Supersymmetry-2007 Conference, Karlsruhe, Germany
March, 2005	Co-chair of the Workshop on LHC/ILC Synergies, SLAC, Stanford, CA, 23 March 2005
2001–2002	Co-chair, Theoretical Advanced Study Institute (TASI-2002), Boulder, CO, 3–28 June 2002
2001–2002	Member, International Scientific Advisory Committee for the SUSY-02 Conference
July, 2001	Aspen Center for Physics, co-organizer of the Workshop on Electroweak Symmetry Breaking and TeV scale physics after LEP
1999–2000	Chairman, 5th International Symposium on Radiative Corrections (RADCOR 2000), Carmel, CA 11–15 September 2000
January, 1999	Co-chair, Parallel Session on Physics Beyond the Standard Model, DPF-99 Conference at UCLA
1998–1999	member, local organizing committee for the 1999 Lepton-Photon International Conference, Stanford University 9–14 August 1999
August, 1997	Aspen Center for Physics, co-organizer of the Workshop on New Physics at the Tevatron and LEP-2
1996–1997	member, International Scientific Advisory Committee for the SUSY-97 Conference
July–August, 1994	Aspen Center for Physics, co-organizer of the Workshop on Supersymmetry
February, 1994	Co-chairman of the Workshop on Electroweak Symmetry Breaking and TeV Scale Physics, held at the Institute for Theoretical Physics, Santa Barbara.
January, 1993	Aspen Winter Conference: Particle Physics from Supercolliders to the Planck Scale, Co-chairman of conference.
December, 1992	Workshop on Electroweak Symmetry Breaking at Colliding-Beam Facilities, Chairman of the workshop, held at U.C. Santa Cruz

July–August, 1991	Aspen Center for Physics, co-organizer of the Workshop on CP Violation and Heavy Flavor Physics
January, 1990	Meeting of the Division of Particles and Fields of the American Physical Society, Rice University, Houston, convener of Beyond the Standard Model mini-conference
August, 1988	24th International Conference on High Energy Physics, Munich, organizer of Beyond the Standard Model parallel session
January, 1988	U.C. Davis Workshop on Higgs Boson Physics, held at U.C. Davis, member of local organizing committee
June-July, 1986	Theoretical Advanced Study Institute, held at U.C. Santa Cruz, member of local organizing committee and editor of Proceedings
August, 1985	Gordon Conference on Particle Physics, organizer of the Electroweak Theory Session
August, 1984	Physics in Collision IV, held at U.C. Santa Cruz, member of local organizing committee
March, 1983	Theoretical Symposium on Intense Sources of High Energy Physics, held at U.C. Santa Cruz, member of local organizing committee and co-editor of Proceedings

Referee

2011–present	Peer-review Referee for the Israel Science Foundation grant proposals.
1985–present	Peer-review Referee for Department of Energy grant proposals.
1984–present	Peer-review Referee for National Science Foundation grant proposals.
1980–present	Peer-review referee for professional journals: *Physical Review Letters*, *Physical Review D*, *Physics Letters B*, *Nuclear Physics B*, *Physics Reports*, *International Journal of Modern Physics A*, *Modern Physics Letters A*, *Zeitschrift für Physik C*, *European Physical Journal C*, *JHEP*, *SciPost Physics*, *Proceedings of Science*, and *Europhysics Letters*.

TEACHING 2026

			Enrollment	Shared?
Winter	Physics 214	Electromagnetism II	7	no
Spring	Physics 251	Group Theory and Modern Physics		no

TEACHING 2024-2025

Spring	Physics 299A	Thesis Research	1	no

TEACHING 2023–2024

Fall	Physics 195B	Senior Thesis II	1	no
	Physics 299B	Thesis Research	1	no
Winter	Physics 195B	Senior Thesis III	1	no
	Physics 214	Electromagnetism II	10	no
	Physics 299B	Thesis Research	1	no

			Enrollment	Shared?
Spring	Physics 297B	Independent Study	1	no
	Physics 299B	Thesis Research	1	no

TEACHING 2022–2023

Fall	Physics 299B	Thesis Research	1	no
Winter	Physics 214	Electromagnetism II	10	no
	Physics 299B	Thesis Research	1	no
Spring	Physics 195A	Senior Thesis I	1	no
	Physics 251	Group Theory and Modern Physics	7	no
	Physics 299B	Thesis Research	1	no

TEACHING 2021–2022

Fall	Physics 299B	Thesis Research	2	no
Winter	Physics 214	Electromagnetism II	16	no
	Physics 299B	Thesis Research	2	no
Spring	Physics 299B	Thesis Research	2	no

TEACHING 2020–2021

Fall	Physics 297B	Independent Study	1	no
	Physics 297C	Independent Study	1	no
Winter	Physics 297B	Independent Study	1	no
	Physics 299B	Thesis Research	1	no
Spring	Physics 299B	Thesis Research	2	no

TEACHING 2019–2020

Fall	Physics 116A	Mathematical Methods in Physics	69	no
	Physics 297B	Independent Study	2	no
Winter	Physics 297B	Independent Study	1	no
	Physics 297C	Independent Study	1	no
Spring	Physics 222	Quantum Field Theory III	4	no
	Physics 297A	Independent Study	1	no
	Physics 297B	Independent Study	1	no

TEACHING 2018–2019

			Enrollment	Shared?
Summer	Physics 297A	Independent Study	1	no
Fall	Physics 297B	Independent Study	1	no
	Physics 297C	Independent Study	1	no
Winter	Physics 297B	Independent Study	2	no
Spring	Physics 251	Group Theory and Modern Physics	11	no
	Physics 297A	Independent Study	1	no
	Physics 297B	Independent Study	1	no

TEACHING 2017–2018

Summer	Physics 297A	Independent Study	1	no
Fall	Physics 297B	Independent Study	1	no
Winter	Physics 215	Introduction to Quantum Mechanics	15	no
	Physics 297A	Independent Study	1	no
	Physics 297B	Independent Study	1	no
Spring	Physics 297A	Independent Study	1	no
	Physics 297B	Independent Study	1	no

TEACHING 2016–2017

Fall	Physics 217	Quantum Field Theory I	10	no
Winter	Physics 214	Electromagnetism II	19	no
	Physics 215	Introduction to Quantum Mechanics	21	no
Spring	Physics 251	Group Theory and Modern Physics	14	no

TEACHING 2015–2016

Fall	Physics 171	General Relativity	22	no
	Physics 299A	Thesis Research	1	no
Winter	Physics 218	Advanced Quantum Field Theory	9	no

TEACHING 2014–2015

Fall	Physics 171	General Relativity	21	no
	Physics 297B	Independent Study	1	no
	Physics 299A	Thesis Research	1	no
	Physics 299B	Thesis Research	1	no

			Enrollment	Shared?
Winter	Physics 218	Advanced Quantum Field Theory	4	no
	Physics 299B	Thesis Research	3	no
Spring	Physics 251	Group Theory and Modern Physics	5	no
	Physics 297A	Independent Study	1	no
	Physics 299B	Thesis Research	2	no

TEACHING 2013–2014

Fall	Physics 297A	Independent Study	1	no
	Physics 299B	Thesis Research	2	no
Winter	Physics 297A	Independent Study	1	no
	Physics 299B	Thesis Research	2	no
Spring	Physics 297A	Independent Study	1	no
	Physics 299B	Thesis Research	2	no

TEACHING 2012–2013

Fall	Physics 116C	Mathematical Methods in Physics	77	no
	Physics 299A	Thesis Research	1	no
	Physics 299B	Thesis Research	1	no
Winter	Physics 214	Electromagnetism II	7	no
	Physics 297A	Independent Study	3	no
	Physics 299B	Thesis Research	2	no
Spring	Physics 251	Group Theory and Modern Physics	6	no
	Physics 297A	Independent Study	1	no
	Physics 299B	Thesis Research	2	no

TEACHING 2011–2012

Fall	Physics 116C	Mathematical Methods in Physics	67	no
	Physics 297A	Independent Study	1	no
	Physics 297B	Independent Study	1	no
Winter	Physics 214	Electromagnetism II	11	no
	Physics 297A	Independent Study	1	no
	Physics 299A	Thesis Research	1	no
Spring	Physics 216	Non-Rel. Quantum Mechanics II	11	no
	Physics 297A	Independent Study	1	no
	Physics 299A	Thesis Research	1	no

TEACHING 2010–2011

			Enrollment	Shared?
Fall	Physics 297A	Independent Study	2	no
Winter	Physics 116A	Mathematical Methods in Physics	77	no
	Physics 297A	Independent Study	1	no
	Physics 297B	Independent Study	1	no
Spring	Physics 251	Group Theory and Modern Physics	7	no
	Physics 297A	Independent Study	2	no

TEACHING 2009–2010

Fall	Physics 139B	Quantum Mechanics II	13	no
	Physics 291C	Particle Physics Seminar	4	no
Winter	Physics 116A	Mathematical Methods in Physics	69	no
Spring	Physics 216	Non-Rel. Quantum Mechanics II	14	no
	Physics 291C	Particle Physics Seminar	7	no

TEACHING 2008–2009

Fall	Physics 291C	Particle Physics Seminar	4	no
	Physics 299B	Thesis Research	1	no
Winter	Physics 5B	Introduction to Physics II	151	no
	Physics 299B	Thesis Research	1	no
Spring	Physics 251	Group Theory and Mod. Physics	4	no
	Physics 291C	Particle Physics Seminar	5	no
	Physics 299B	Thesis Research	1	no

TEACHING 2007–2008

Summer	Physics 299A	Thesis Research	1	no
Fall	Physics 212	Electromagnetism I	13	no
	Physics 291C	Particle Physics Seminar	8	no
	Physics 299B	Thesis Research	2	no
Winter	Physics 5B	Introduction to Physics II	146	no
	Physics 297B	Independent Study	1	no
	Physics 299B	Thesis Research	2	no

			Enrollment	Shared?
Spring	Physics 222	Quantum Field Theory III	6	no
	Physics 297B	Independent Study	1	no
	Physics 299B	Thesis Research	2	no

TEACHING 2006–2007

Summer	Physics 299A	Thesis Research	1	no
Fall	Physics 299B	Thesis Research	1	no
	Physics 299C	Thesis Research	1	no
Winter	Physics 214	Electromagnetism II	12	no
	Physics 297B	Independent Study	1	no
	Physics 299B	Thesis Research	1	no
	Physics 299C	Thesis Research	1	no
Spring	Physics 251	Group Theory	7	no
	Physics 297	Independent Study	1	no
	Physics 299	Thesis Research	2	no

TEACHING 2005–2006

Summer	Physics 297A	Independent Study	1	no
Fall	Physics 217	Quantum Field Theory I	8	no
	Physics 297B	Independent Study	2	no
Winter	Physics 116A	Mathematical Methods in Physics	62	no
	Physics 297A	Independent Study	1	no
	Physics 297B	Independent Study	2	no
Spring	Physics 222	Quantum Field Theory III	4	no
	Physics 297B	Independent Study	1	no
	Physics 299C	Thesis Research	1	no

TEACHING 2004–2005

Fall	Physics 217	Quantum Field Theory I	9	no
	Physics 297	Independent Study	1	no
	Physics 299	Thesis Research	1	no
Winter	Astronomy 202	Electromagnetism and Plasmas	8	no
	Physics 213	Electromagnetism and Plasmas	18	no
	Physics 297	Independent Study	1	no
	Physics 299	Thesis Research	1	no

			Enrollment	Shared?
Spring	Physics 222	Quantum Field Theory III	4	no
	Physics 297	Independent Study	2	no
	Physics 299	Thesis Research	1	no

TEACHING 2003–2004

Fall	Physics 171	General Relativity	19	no
	Physics 297	Independent Study	1	no
	Physics 299	Thesis Research	1	no
Winter	Physics 214	Electromagnetism II	14	no
	Physics 299	Thesis Research	1	no
Spring	Physics 222	Quantum Field Theory III	10	no
	Physics 299	Thesis Research	1	no

TEACHING 2002–2003

Fall	Physics 199	Tutorial	1	no
	Physics 297	Independent Study	1	no
Winter	Sabbatical			
	Physics 299	Thesis Research	1	no
Spring	Physics 251	Group Theory	5	no
	Physics 299	Thesis Research	1	no

TEACHING 2001–2002

Fall	Physics 171	General Relativity	12	no
	Physics 297	Independent Study	1	no
	Physics 299	Thesis Research	1	no
Winter	Sabbatical			
	Physics 297	Independent Study	1	no
	Physics 299	Thesis Research	1	no
Spring	Sabbatical			
	Physics 299	Thesis Research	1	no

TEACHING 2000–2001

Fall	Physics 217	Quantum Field Theory I	10	no
Winter	Sabbatical			

			Enrollment	Shared?
Spring	Physics 216	Quantum Mechanics II	12	no
	Physics 297	Independent Study	1	no

TEACHING 1999–2000

Fall	Physics 217	Quantum Field Theory I	2	no
Winter	Physics 112	Therm. and Stat. Mech.	36	no
	Physics 214	Electromagnetism II	10	no
	Physics 297	Independent Study	1	no
Spring	Physics 223	Strong Interactions	5	no
	Physics 199	Tutorial	2	no

TEACHING 1998–1999

Summer	Physics 299	Thesis Research	1	no
Fall	Physics 299	Thesis Research	1	no
Winter	Physics 112	Therm. and Stat. Mech.	24	no
	Physics 299	Thesis Research	1	no
Spring	Physics 251	Group Theory	5	no
	Physics 299	Thesis Research	1	no

TEACHING 1997-98

Fall	Physics 212	Electromagnetism I	7	no
	Physics 299	Thesis Research	1	no
Winter	Physics 214	Electromagnetism II	11	no
	Physics 14	Vector Calculus	11	no
	Physics 299	Thesis Research	1	no
Spring	Physics 223	Strong Interactions	3	no
	Physics299	Thesis Research	1	no

TEACHING 1996–1997

Fall	Physics 139B	Quantum Mechanics II	5	no
	Physics 297	Independent Study	1	no
Winter	Physics 218	Quantum Field Theory II	5	no
	Physics 299	Thesis Research	1	no

			Enrollment	Shared?
Spring	Physics 222	Electroweak Interactions	8	no
	Physics 299	Thesis Research	1	no

TEACHING 1995–1996

Fall	Physics 114B	Math. Meth. in Physics II	26	no
	Physics 297	Independent Study	1	no
	Physics 299	Thesis Research	1	no
	Physics 301	Supervised Teaching	1	no
Winter	Physics 218	Quantum Field Theory II	7	no
	Physics 14	Vector Calculus	14	no
	Physics 297	Independent Study	1	no
	Physics 299	Thesis Research	1	no
Spring	Physics 217	Quantum Field Theory I	10	no
	Physics 199	Undergrad. Thesis Research	1	no
	Physics 298	Research Project	1	no
	Physics 299	Thesis Research	1	no

TEACHING 1994–1995

Fall	Physics 10	Overview of Physics	82	yes
	Physics 114B	Math. Meth. in Physics II	51	no
	Physics 297	Independent Study	3	no
	Physics 298	Research Project	2	no
	Physics 299	Thesis Research	3	no
	Physics 301	Supervised Teaching	1	no
Winter	Sabbatical			
	Physics 298	Research Project	1	no
	Physics 299	Thesis Research	2	no
Spring	Sabbatical			
	Physics 298	Research Project	1	no
	Physics 299	Thesis Research	2	no

TEACHING 1993–1994

Fall	Physics 215	Quantum Mechanics I	8	no
	Physics 298	Research Project	2	no
	Physics 299	Thesis Research	2	no

			Enrollment	Shared?
Winter	Sabbatical			
	Physics 205	Introduction to Research	7	no
	Physics 297	Independent Study	1	no
	Physics 298	Research Project	2	no
	Physics 299	Thesis Research	3	no
Spring	Physics 223	Strong Interactions	7	no
	Physics 297	Independent Study	1	no
	Physics 298	Research Project	1	no
	Physics 299	Thesis Research	2	no

TEACHING 1992–1993

Fall	Physics 215	Quantum Mechanics I	18	no
	Physics 298	Research Project	3	no
Winter	Physics 251	Group Theory	9	no
	Physics 297	Independent Study	1	no
	Physics 298	Research Project	1	no
	Physics 299	Thesis Research	2	no
Spring	Physics 3	Concepts of Modern Physics	8	no
	Physics 297	Independent Study	1	no
	Physics 298	Research Project	1	no
	Physics 299	Thesis Research	2	no
	Physics 301	Supervised Teaching	1	no

TEACHING 1991–1992

Fall	Physics 212	Electromagnetism I	10	no
	Physics 297	Independent Study	6	no
	Physics 298	Research Project	3	no
	Physics 299	Thesis Research	3	no
Winter	Physics 3	Concepts of Modern Physics	25	no
	Physics 297	Independent Study	4	no
	Physics 298	Research Project	3	no
	Physics 299	Thesis Research	2	no
Spring	Physics 217	Quantum Field Theory I	9	no
	Physics 297	Independent Study	1	no
	Physics 298	Research Project	3	no
	Physics 299	Thesis Research	2	no

TEACHING 1990–1991

			Enrollment	Shared?
Fall	Physics 212	Electromagnetism I	13	no
	Physics 297	Independent Study	1	no
	Physics 298	Research Project	2	no
	Physics 299	Thesis Research	2	no
Winter	Physics 251	Group Theory	13	no
	Physics 297	Independent Study	1	no
	Physics 298	Research Project	1	no
	Physics 299	Thesis Research	2	no
Spring	Physics 217	Quantum Field Theory I	7	no
	Physics 298	Research Project	2	no
	Physics 299	Thesis Research	2	no

TEACHING 1989–1990

Fall	Physics 218	Quantum Field Theory II	6	no
	Physics 297	Independent Study	4	no
	Physics 298	Research Project	3	no
Winter	Physics 216	Quantum Mechanics II	13	no
	Physics 297	Independent Study	4	no
	Physics 298	Research Project	2	no
	Physics 299	Thesis Research	1	no
Spring	Physics 223	Strong Interactions	4	no
	Physics 297	Independent Study	3	no
	Physics 298	Research Project	2	no
	Physics 299	Thesis Research	1	no

TEACHING 1988–1989

Fall	Physics 218	Quantum Field Theory II	7	no
	Physics 297	Independent Study	2	no
Winter	Physics 216	Quantum Mechanics II	7	no
	Physics 297	Independent Study	5	no
Spring	Physics 251	Group Theory	9	no
	Physics 297	Independent Study	4	no
	Physics 298	Research Project	2	no

TEACHING 1987–1988

			Enrollment	Shared?
Fall	Physics 215	Quantum Mechanics I	11	no
	Physics 297	Independent Study	2	no
Winter	Physics 15	Stat. Physics and Thermo.	35	no
	Physics 297	Independent Study	2	no
	Physics 301	Supervised Teaching	1	no
Spring	Physics 297	Independent Study	1	no

TEACHING 1986–1987

Fall	Physics 215	Quantum Mechanics I	8	no
	Physics 297	Independent Study	1	no
	Physics 299	Thesis Research	1	no
Winter	Physics 216	Quantum Mechanics II	7	no
	Physics 297	Independent Study	1	no
	Physics 299	Thesis Research	1	no
Spring	Physics 297	Independent Study	1	no
	Physics 299	Thesis Research	1	no

TEACHING 1985–1986

Winter	Physics 223	Strong Interactions	6	no
Spring	Physics 299	Thesis Research	1	no

TEACHING 1984–1985

Fall	Physics 139A	Quantum Mechanics I	30	no
	Physics 297	Independent Study	1	no
	Physics 301	Supervised Teaching	1	no
Winter	Physics 139B	Quantum Mechanics II	11	no
	Physics 297	Independent Study	3	no

TEACHING 1983–1984

Winter	Physics 290	Special Topics	5	no

TEACHING 1982–1983

Fall	Physics 215	Quantum Mechanics	7	no

MISCELLANEOUS UNDERGRADUATE TEACHING

Fall 2005	Physics 10	Overview of Physics	contributing lecture
Fall 2004	Physics 10	Overview of Physics	contributing lecture
Fall 2002	Physics 10	Overview of Physics	contributing lecture
Fall 1993	Physics 10	Overview of Physics	contributing lecture
Fall 1992	Physics 10	Overview of Physics	contributing lecture
Fall 1991	Physics 10	Overview of Physics	contributing lecture
Fall 1990	Physics 10	Overview of Physics	contributing lecture
Fall 1989	Physics 10	Overview of Physics	contributing lecture

PHYSICS COLLOQUIA GIVEN (2009–present)

April 10, 2024	Higgs Boson Physics: The View Ahead	Univ. Federal do ABC
Oct. 24, 2017	Does the Higgs boson portend the end of particle physics?	Ohio State University
Oct. 3, 2017	Does the Higgs boson portend the end of particle physics?	National Taiwan Univ.
Nov. 29, 2012	The Higgs Boson Unleashed	UC Santa Cruz
Nov. 19, 2012	The Higgs Boson Unleashed	Univ. Southern Cal.
Oct. 29, 2012	The Higgs Boson Unleashed	Sonoma State Univ.
Nov. 19, 2010	The Higgs Hunter's Guide at the Dawn of the LHC Era	Univ. Heidelberg
Nov. 5, 2009	The Higgs Hunter's Guide at the Dawn of the LHC Era	UC Santa Cruz
Oct. 29, 2009	The Higgs Hunter's Guide at the Dawn of the LHC Era	Cal. Poly State Univ.

OTHER TEACHING

July, 2023	Pre-SUSY 2023	(2 Lectures)
August, 2021	49th SLAC Summer Institute, "The Higgs State Fair"	(1 Lecture)
August, 2019	2019 Sorak Symposium	(2 Lectures)
August, 2018	46th SLAC Summer Institute, "Standard Model at 50"	(1 Lecture)
June, 2016	Pre-SUSY 2016	(3 Lectures)
June, 2016	Theoretical Advanced Study Institute, Boulder, Colorado	(4 Lectures)
July, 2012	40th SLAC Summer Institute, "The Electroweak Scale"	(2 Lectures)
September, 2011	IDPASC Higgs School, Foz do Arelho, Portugal,	(2 Lectures)
August, 2008	CERN-Fermilab Hadron Collider Physics Summer School	(2 Lectures)
August, 2004	PSI Zuoz Summer School on Particle Physics, Zuoz, Switzerland	(5 Lectures)
June, 2004	Theoretical Advanced Study Institute, Boulder, Colorado	(4 Lectures)
September, 2002	Herbstschule für Hochenergiephysik Maria Laach	(4 Lectures)
June, 2001	Trieste Summer School on High Energy Physics	(4 Lectures)
November, 1999	SCIPP Outreach Physics Workshop	(1 Lecture)
June, 1997	Trieste Summer School in High Energy Physics and Cosmology	(4 Lectures)
July, 1995	Institut für Theoretische Teilchenphysik, Karlsruhe, Germany	(3 Lectures)
July, 1994	Eötvös Summer School Graduate Courses, Budapest, Hungary	(3 Lectures)
August, 1993	XXI SLAC Summer Institute on Particle Physics	(3 Lectures)
June, 1992	Theoretical Advanced Study Institute, Boulder, Colorado	(3 Lectures)
August, 1990	Mt. Sorak Summer School on Theoretical Physics, South Korea	(2 Lectures)
June, 1990	Theoretical Advanced Study Institute, Boulder, Colorado	(6 Lectures)

UCSC COURSE WEB PAGES

Winter, 2026	Physics 214	http://scipp.ucsc.edu/~haber/ph214/
Winter, 2024	Physics 214	http://scipp.ucsc.edu/~haber/archives/physics214_24/
Spring, 2023	Physics 251	http://scipp.ucsc.edu/~haber/ph251/
Winter, 2023	Physics 214	http://scipp.ucsc.edu/~haber/archives/physics214_23/
Winter, 2022	Physics 214	http://scipp.ucsc.edu/~haber/archives/physics214_22/
Spring, 2020	Physics 222	http://scipp.ucsc.edu/~haber/ph222/
Fall 2019	Physics 116A	http://scipp.ucsc.edu/~haber/ph116A/
Spring, 2019	Physics 251	http://scipp.ucsc.edu/~haber/archives/physics251_19/
Winter, 2018	Physics 215	http://scipp.ucsc.edu/~haber/ph215/
Spring, 2017	Physics 251	http://scipp.ucsc.edu/~haber/archives/physics251_17/
Winter, 2017	Physics 215	http://scipp.ucsc.edu/~haber/archives/physics215_17/
Winter, 2017	Physics 214	http://scipp.ucsc.edu/~haber/archives/physics214_17/
Fall, 2016	Physics 217	http://scipp.ucsc.edu/~haber/ph217/
Winter, 2016	Physics 218	http://scipp.ucsc.edu/~haber/ph218/
Fall, 2015	Physics 171	http://scipp.ucsc.edu/~haber/ph171/
Spring, 2015	Physics 251	http://scipp.ucsc.edu/~haber/archives/physics251_15/
Winter, 2015	Physics 218	http://scipp.ucsc.edu/~haber/archives/physics218_15/
Fall, 2014	Physics 171	http://scipp.ucsc.edu/~haber/archives/physics171_14/
Spring, 2013	Physics 251	http://scipp.ucsc.edu/~haber/archives/physics251_13/
Winter, 2013	Physics 214	http://scipp.ucsc.edu/~haber/archives/physics214_13/
Fall, 2012	Physics 116C	http://scipp.ucsc.edu/~haber/ph116C/
Spring, 2012	Physics 216	http://scipp.ucsc.edu/~haber/ph216/
Winter, 2012	Physics 214	http://scipp.ucsc.edu/~haber/archives/physics214_12/
Fall, 2011	Physics 116C	http://scipp.ucsc.edu/~haber/archives/physics116C11/
Spring, 2011	Physics 251	http://scipp.ucsc.edu/~haber/archives/physics251_11/
Winter, 2011	Physics 116A	http://scipp.ucsc.edu/~haber/archives/physics116A11/
Spring, 2010	Physics 216	http://scipp.ucsc.edu/~haber/archives/physics216_10/
Winter, 2010	Physics 116A	http://scipp.ucsc.edu/~haber/archives/physics116A10/
Fall, 2009	Physics 139B	http://scipp.ucsc.edu/~haber/ph139B/
Winter, 2009	Physics 5B	http://scipp.ucsc.edu/~haber/ph5B/
Winter, 2008	Physics 5B	http://scipp.ucsc.edu/~haber/archives/physics5B08/
Winter, 2006	Physics 116A	http://scipp.ucsc.edu/~haber/archives/physics116A06/
Fall, 2003	Physics 171	http://scipp.ucsc.edu/~haber/archives/physics117_03/
Fall, 2001	Physics 171	http://scipp.ucsc.edu/~haber/archives/physics117_01/
Winter, 2000	Physics 112	http://scipp.ucsc.edu/~haber/ph112/

MISCELLANEOUS GRADUATE TEACHING

1990–1993 Co-organizer of Research Opportunities in Physics Seminar Series

THESIS ADVISING Advisor or co-advisor of completed Ph.D. Thesis

2025	Eric Shahly	"Studies in the renormalization of the two-Higgs-doublet model"
2024	Joseph Connell	"Theory and Phenomenology of Two-Higgs-Doublet Models with Flavor-Aligned and Six-Texture Yukawa Couplings"

2017	Laurel Stephenson-Haskins	"Supersymmetry, Inflation, and Dark Matter"
2015	Laura Fava	"Precision Measurement of the Strong Coupling Constant of the Minimal Universal Extra Dimensions Model Using Like-sign Leptons at the LHC"
2015	Edward Santos	"Renormalization Group Constraints on the Two Higgs Doublet Model"
2009	Deva O'Neil	"Phenomenology of the Basis-Independent CP-Violating Two-Higgs Doublet Model"
2008	John Mason	"Aspects of Supersymmetry Breaking"
2005	Douglas Pahel	"CP violating effects in W and Z boson pair productions at the International Linear Collider in the minimal supersymmetric standard model"
1999	Heather Logan	"Radiative corrections to the $Zb\bar{b}$ vertex and constraints on extended Higgs sectors"
1995	John Hiser	"A Triplet Supersymmetric Model"
1992	Marco Diaz	"Radiative Corrections to Higgs Masses in the MSSM"
1992	Ralf Hempfling	"Radiative Corrections to the Higgs Sector in the Minimal Supersymmetric Model"
1991	Paulo Gomes	"Charged Higgs Decays into $W\gamma$ and WZ in the Minimal Supersymmetric Model"
1987	Kim Griest	"Stable, Heavy, Neutral Particles in the Sun and in Toponium Decay"

Technical Advisor of Senior Thesis

2016	Jason E. Cohen	"An Exploration of General Relativistic Bending of Light, Lensing and Orbital Motion Through the Presentation of Visual Simulations"
2012	Matthew Stanton	"Vector Boson Scattering Processes at the Upgraded LHC"
2012	Kevin Goldberg	"Let's Go Sailing!"
2008	James Beacham	"A comparison of the fermionic overlap-Dirac operator and pure gauge field definitions of the quenched topological susceptibility in the Schwinger model"
1998	Jacob Mannix	"Models of Supersymmetry Breaking"
1996	Robert Gingrich	"Particles Leading to Grand Unification"
1987	Michael Bourne	"Non-Relativistic Determination of the Toponium Spectrum and Transmission Rates"
1986	Karl Offen	"The Physics of a Tennis Racket"

GRADUATE STUDENTS SUPERVISED

2017-2025 Eric Shahly
2017-2024 Joseph Connell
2013–2016 Laurel Stevenson-Haskins
2009–2015 Edward Santos
2009–2015 Laura Fava

2005–2009 Deva O'Neill
2006–2008 Heath Holguin
2004–2008 John Mason
2001–2005 Douglas Pahel
2001–2002 Fred Cauthen
1998–2000 Erik Kramer
1994–1999 Heather Logan
1993–1995 Per Lasse Reinertsen
1992–1995 John Hiser
1992–1993 Rick Rennels
1989–1995 Carlos Figueroa
1989–1992 Ralf Hempfling
1989–1992 Marco Diaz
1987–1991 Paulo Gomes
1985–1987 Kim Griest

EXAM COMMITTEES

Ph.D. Oral Qualifying Exam Committee

Physics

2026 Kuroush Allameh
2021 Joseph Connell
2020 Eric Shahly
2018 Logan Morrison
2018 Amita Kuttner
2016 Joseph Schindler
2016 Adam Coogan
2015 Di Xu
2015 Laurel Stevenson-Haskins
2012 Edward Santos
2012 T.J. Torres
2011 Laura Fava
2011 Angelo Monteux
2010 Lawrence Pack
2010 Weitao Wu
2010 John Kehayias
2008 Lorenzo Ubaldi
2007 Jeff Jones
2006 Alex Morisse
2006 John Mason
2006 Deva O'Neil
2006 Rudy Gilmore
2003 Douglas Pahel
2003 Sun Zheng
2002 Erik Kramer
2002 Michael Wilson

2000 Josh Gray
1999 Alexey Anissimov
1998 Robert Echols
1997 Riko Wichmann
1997 Rong Li
1997 Douglas Epperson
1996 Heather Logan
1994 Yuriy Shirman
1994 Jeffrey Rahn
1993 John Bagnasco
1992 Carlos Figueroa
1992 Tom Yang
1992 Judy Leslie
1992 John Hiser
1992 Xi Liu
1992 Jaipal Tuttle
1991 Ralf Hempfling
1991 Marco Diaz
1991 Douglas MacIntire
1990 Scot Olivier
1989 Paulo Gomes
1988 John Drinkard
1988 Corrado Gatto
1986 Kim Griest

Mathematics

2023 Greyson Meyer
2023 Maneesha Ampagouni
2020 Nathan Marianovsky
2014 Rob Carman
2007 Chris Marks
2006 Jennifer Mogel
2002 David Raske
1999 Robert Hartmann
1997 Mark Hoyle
1991 Yves Martin
1990 Shu-xian Lou

Ph.D. THESIS DEFENSE COMMITTEE

2025 Rafael Boto (Instituto Superior Técnico, Universidade de Lisboa)
2025 Eric Shahly
2024 Joseph Connell
2024 Miguel Bento (Instituto Superior Técnico, Universidade de Lisboa)
2021 Logan Morrison
2019 Joseph Schindler
2018 Di Xu

2017 Laurel Stevenson-Haskins
2015 Laura Fava
2015 Edward Santos
2014 Angelo Monteux
2012 Lawrence Pack
2011 Weitao Wu
2011 Lorenzo Ubaldi
2009 Jeff Jones
2009 Sean Echols
2009 Deva O'Neil
2008 John Mason
2007 Sun Zheng
2005 Douglas Pahel
2004 Erik Kramer
2002 Alexey Anissimov
2001 Josh Gray
1999 Riko Wichmann
1999 Rong Li
1999 Robert Echols
1999 Heather Logan
1997 Jeffrey Rahn
1997 Yuriy Shirman
1995 John Hiser
1995 Judy Leslie
1994 John Bagnasco
1993 Douglas MacIntire
1993 Jaipal Tuttle
1992 Ralf Hempfling
1992 Marco Diaz
1991 Scot Olivier
1991 Paulo Gomes
1990 John Drinkard
1989 Corrado Gatto
1989 Sterling Watson
1987 Rongsheng Xu
1987 Kim Griest

SCIPP THEORY POST-DOCTORAL RESEARCH ASSOCIATES

2025-2026 Pouya Asadi
2023-2026 Reuven Balkin
2023-2025 Sarah Geller
2021–2024 William DeRocco
2020–2024 Jeff Dror
2018–2021 Hiren Patel
2015–2017 Francesco D'Eramo

2014–2017	Tim Stefaniak
2012–2015	William Shepherd
2011–2014	Patrick Draper
2010–2012	Chang Soon Park
2009–2011	Sebastian Grab
2007–2010	Guido Festuccia
2006–2009	Linda Carpenter
2005–2006	Andreas Birkedal
2004–2007	Assaf Shomer
2002–2005	Patrick Fox
2001–2004	Elie Gorbatov
1999–2002	Michael Graesser
1997–1998	Stephen Martin
1996–1997	Patrick Huet
1995–1997	Jens Erler
1993–1995	Carl Schmidt
1993–1994	Scott Thomas
1991–1993	Alex Pomarol
1991–1993	Robert Leigh
1991	C.P. Yuan
1987–1989	Joseph Lykken
1985–1986	Marc Sher