

Curriculum Vitae

Hsin-Chia Cheng

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Education

- Ph. D., Physics, University of California at Berkeley, 1996.
Thesis title: Scalar mass relations and flavor violations in supersymmetric theories.
Advisor: Prof. Lawrence J. Hall.
- M. A., Physics, University of California at Berkeley, 1991.
- B. S., Electrical Engineering, National Taiwan University, Taiwan, R.O.C., 1988.

Academic Experience

- Assistant Professor, Department of Physics, University of California, Davis, 2005–present.
- Research Associate, Department of Physics, Harvard University, 2002–2005.
- Research Associate (McCormick Fellow), Enrico Fermi Institute, University of Chicago, 1999–2002.
- Research Associate, Theoretical Physics Department, Fermi National Accelerator Laboratory, 1996–1999.
- Graduate student research assistant, Theoretical Physics Group, Lawrence Berkeley Laboratory, 1993–1996.
- Graduate student instructor, Department of Physics, University of California at Berkeley, 1991–1993.
- Referee for physics journals, *Physical Review Letters*, *Physical Review D*, *Physics Letters B*, *Journal of Cosmology and Astroparticle Physics* and *Journal of High Energy Physics*.

Honors

- Outstanding Junior Investigator Award, Department of Energy, 2006-present.
- Robert R. McCormick Fellowship, University of Chicago, 1999-2001.
- University of California Regents Fellowship, 1992-1993.
- Tse-Wei Liu Memorial Fellowship, University of California, 1990-1991.
- First place upon graduation in Class 88, Department of Electrical Engineering, National Taiwan University.
- Book Coupon Awards (to the top 5% of the students in each class), National Taiwan University, 1984-1988.

Conference talks

- “New Approaches in Electroweak Symmetry Breaking,”
Plenary talk at the 2008 Phenomenology Symposium, April 28–30, 2008, University of Wisconsin–Madison.
- “Mass Determinations in Decay Chains with Missing Energy,”
KITP Program: Physics of the Large Hadron Collider, February 4 – June 6, 2008, Kavli Institute for Theoretical Physics, Santa Barbara, California.
- “Mass Determination in SUSY-like Events with Missing Energy,”
CERN BSM Theory Institute: New Physics and the LHC, Aug. 13 – Sep. 7, 2007, CERN, Geneva, Switzerland.
- “Little Higgs, Non-standard Higgs, No Higgs and All That,”
Plenary talk at The 15th International Conference on Supersymmetry and Unification of Fundamental Interactions, July 26 – Aug. 1, 2007, Karlsruhe, Germany.
- “Little Higgs M-Theory,”
2006 International Workshop on Origin of Mass and Strong Coupling Gauge Theories (SCGT 06), Nov. 21–24, 2006, Nagoya, Japan.
- “Little Higgs M-Theory,”
Aspen Summer 2006 Workshop, “Particle Theory in Anticipation of the LHC” Aspen Center for Physics, Jul. 31 – Sep. 3, 2006, Aspen, Colorado.
- “Little Higgs M-theory,”
The 14th International Conference on Supersymmetry and Unification of Fundamental Interactions, June 12-17, 2006, Irvine, California, USA.
- “Kaluza-Klein Dark Matter,”
Complementarity between Dark Matter Searches and Collider Experiments, June 10-11, 2006, UC Irvine, California, USA.

- “Universal Extra Dimensions,”
Monte Carlo Tools for Beyond the Standard Model Physics, Mar. 20-21, 2006, Fermilab, Batavia, Illinois, USA.
- “Little Higgs theories and dark matter,”
TeV Particle Astrophysics Workshop 2005, July 13–15, 2005, Fermi National Accelerator Laboratory, Batavia, Illinois, USA.
- “Ghost condensation and a consistent infrared modification of gravity,”
The 12th International Conference on Supersymmetry and Unification of Fundamental Interactions, June 17-23, 2004, Epochal Tsukuba, Tsukuba, Japan.
- “Little hierarchy problem and little Higgs theories,”
The 12th International Conference on Supersymmetry and Unification of Fundamental Interactions, June 17-23, 2004, Epochal Tsukuba, Tsukuba, Japan.
- “Little Higgs and the T-parity,”
Pisa Seminar on New Directions in Physics beyond the Standard Model, Scuola Normale Superiore - Istituto Nazionale di Fisica Nucleare, May 31 – June 4 2004, Pisa, Italy.
- “Bosonic supersymmetry? Phenomenology of universal extra dimensions,”
Summer 2002 Workshop, “Advances in Field Theory and Applications to Particle Physics,” Aspen Center for Physics, Jul. 8 – Aug. 4, 2002, Aspen, Colorado.
- “Phenomenology of universal extra dimensions,”
The XVI Spring School on Particles and Fields March 27-30, 2002, National Taiwan Normal University, Taipei, Taiwan.
- “Universal extra dimensions and the e^-e^- collider,”
The 4th International Workshop on Electron-Electron Interactions at TeV energies, Dec. 7-9, 2001, University of California, Santa Cruz.
- “Electroweak symmetry breaking and extra dimensions,”
The P3 “Scales Beyond 1 TeV” Group at the Snowmass 2001 meeting, Snowmass, CO, Jun. 30–Jul. 21, 2001.
- “Composite Higgs from extra dimensions,”
Workshop on the Future of Higgs Physics, Fermi National Accelerator Laboratory, Batavia, IL, May 3–5, 2001.
- “The e^-e^- option,”
2nd International Workshop on High Energy Photon Colliders, Fermi National Accelerator Laboratory, Batavia, IL, Mar. 14–17, 2001.
- “Top quark condensate models in extra dimensions,”
Thinkshop2 on Top-quark physics for Run II and beyond, Fermi National Accelerator Laboratory, Batavia, IL, November 10 - 12, 2000.

- “Electroweak symmetry breaking and extra dimensions,”
Linear Collider Workshop 2000 (LCWS 2000) Fermi National Accelerator Laboratory,
Batavia, IL, October 24-28, 2000.
- “Composite Higgs and extra dimensions,”
Aspen Workshop Summer 2000 “New Physics at the Weak Scale and Beyond,” Aspen,
CO, Aug 7-Sep 10, 2000.
- “Minimal electroweak symmetry breaking model in extra dimensions,”
The Meeting of The Division of Particles and Fields of The American Physical Society
(DPF2000), August 9-12, 2000, Ohio State University, Columbus, Ohio.
- “Composite Higgs and extra dimensions,”
Santa Fe 2000 Summer Workshop “Supersymmetry, Branes and Extra Dimensions,”
Sante Fe, NM, July 31-August 11, 2000.
- “Composite Higgs as a prediction of extra dimensions,”
The 8th International Conference on Supersymmetries in Physics (SUSY2K) CERN,
Geneva, Switzerland, 26 June – 1 July 2000.
- “Dynamical electroweak symmetry breaking in extra dimensions,”
Theoretical Institute on SUSY and Higgs 2000, Argonne National Laboratory, April
25th to May 12th, 2000.
- “Electroweak symmetry breaking from extra dimensions,”
Pheno 2000 Symposium: Phenomenology for the Nu Century, University of Wiscon-
sin, Madison, April 17–19, 2000.
- “Electroweak symmetry breaking by extra dimensions,”
The 7th International Symposium on Particles, Strings and Cosmology Granlibakken,
Lake Tahoe, California, December 10-16, 1999.
- “Doublet-triplet splitting and fermion masses with extra dimensions,”
The 7th International Conference on Supersymmetries in Physics (SUSY99), June
14-19, 1999, Fermi National Accelerator Laboratory, Batavia, Illinois.
- “A chiral supersymmetric standard model,”
The 6th International Conference on Supersymmetries (SUSY98), Jul. 11–17, 1998,
Oxford University, Oxford, England.
- “Superoblique corrections and precision SUSY coupling measurements,”
Pheno-CTEQ Symposium 98, Mar. 23–26, 1998, Madison, Wisconsin.
- “Flavor and CP violations from sleptons at the muon collider,”
Workshop on Physics at the First Muon Collider and at the Front End of a Muon
Collider, Nov. 6–9, 1997, Fermilab, Batavia, Illinois.

- “Precision SUSY measurements at the e^-e^- collider,”
The 2nd International Workshop on Electron-Electron Interactions at TeV Energies,
Sep. 22–24, 1997, University of California, Santa Cruz.
- “Supersymmetric lepton flavor violation at the NLC,”
Symposium on Flavor-Changing Neutral Currents: Present and Future Studies (FCNC
97), Feb. 19–21, 1997, Santa Monica, California.

Seminars, Colloquia, and Lectures

- “Mass determination in events with missing energy at the LHC I & II,”
National Taiwan University, Taipei, Taiwan, Dec. 24 & 26, 2007;
National Tsinghua University, Hsinchu, Taiwan, Dec. 27, 2007.
- “Mass determination in SUSY-like events with missing energy,”
Institute for Advance Study, Princeton, New Jersey, Sep. 11, 2007;
University of California, Berkeley, California, May 21, 2007;
University of California, Irvine, California, May 2, 2007.
- “Little Higgs M-theory,”
National Taiwan University, Taipei, Taiwan, Dec. 25, 2006;
National Tsinghua University, Hsinchu, Taiwan, Dec. 26, 2006;
Stanford Linear Accelerator Center, Menlo Park, California, July 12, 2006.
- “A Higgs phase of gravity,”
Stanford Linear Accelerator Center, Menlo Park, California, Dec. 2, 2005;
Johns Hopkins University, Baltimore, Maryland, Apr. 2, 2004.
- “Little hierarchy problem and little Higgs theories,”
University of Maryland, College Park, Maryland, Mar. 28, 2005;
University of California, Irvine, California, Mar. 16, 2005;
Fermilab, Batavia, Illinois, Mar. 10, 2005;
University of California, Davis, California, Mar. 4, 2005.
- “Modifying gravity at large distances,”
Physics Department Colloquium, Syracuse University, Syracuse, New York, Feb. 21,
2005;
- “Goldstone dynamics of spontaneous Lorentz violation,”
Syracuse University, Syracuse, New York, Feb. 21, 2005;
University of Texas, Austin, Texas, Feb. 1, 2005;
University of Massachusetts, Amherst, Massachusetts, Jan. 21, 2005;
National Taiwan University, Taipei, Taiwan, Dec. 28, 2004;
Academia Sinica, Taipei, Taiwan, Dec. 16, 2004;
National Center for Theoretical Science, Hsinchu, Taiwan, Dec. 15, 2004;
Institute for Advanced Study, Princeton, New Jersey, Nov. 11, 2004;
Rutgers University, Piscataway, New Jersey, Nov. 5, 2004.

- “Universal dynamics of spontaneous Lorentz violation,”
National Taiwan University, Taipei, Taiwan, Jun. 25, 2004;
National Center for Theoretical Science, Hsinchu, Taiwan, Jun. 28, 2004.
- “Little hierarchy, little Higgs and a little symmetry,”
Joint theory seminar of Harvard, MIT and Boston University, Massachusetts Institute of Technology, Cambridge, Massachusetts, Feb. 4, 2004.
- “Modifying gravity in the infrared,”
Physics Department Colloquium at National Taiwan University, Taipei, Taiwan, Dec. 23, 2003.
- “Ghost condensation and infrared modification of gravity,”
Cornell University, Ithaca, New York, Oct. 1, 2003;
Yale University, New Haven, Connecticut, Nov. 4, 2003;
Academia Sinica, Taipei, Taiwan, Dec. 18, 2003;
National Taiwan University, Taipei, Taiwan, Dec. 24, 2003;
National Center for Theoretical Science, Hsinchu, Taiwan, Dec. 30, 2003;
University of Illinois, Chicago, Illinois, Jan. 26, 2004;
Fermilab, Batavia, Illinois, Jan. 27, 2004.
- “TeV symmetry and the little hierarchy problem,”
National Taiwan University, Taipei, Taiwan, Dec. 22, 2003;
National Center for Theoretical Science, Hsinchu, Taiwan, Jan. 2, 2004.
- “Extranatural inflation,”
University of Maryland, College Park, Maryland, Mar. 31, 2003;
University of Minnesota, Minneapolis, Minnesota, Apr. 3, 2003;
Boston University, Boston, Massachusetts, Apr. 14, 2003;
Yale University, New Haven, Connecticut, Apr. 15, 2003.
- “Really natural inflation,”
University of California, Berkeley, California, Feb. 20, 2003.
- “Kaluza-Klein dark matter,”
Harvard University, Cambridge, Massachusetts, Oct. 2, 2002;
Los Alamos National Laboratory, New Mexico, Jan. 13, 2003.
- “Deconstructing extra dimensions,”
National Tsinghua University, Hsinchu, Taiwan, Apr. 15, 2002;
National Taiwan University, Taipei, Taiwan, Apr. 18, 2002.
- “Universal extra dimensions,”
New York University, New York, NY, Jan. 14, 2002;
Brookhaven National Laboratory, Upton, New York, Jan. 16, 2002;
Fermilab, Batavia, Illinois, Jan. 24, 2002;
University of Chicago, Chicago, Illinois, Feb. 4, 2002.

- “(Almost) invisible extra dimensions,”
Harvard University, Cambridge, Massachusetts, Nov. 6, 2001;
Yale University, New Haven, Connecticut, Nov. 13, 2001;
University of Florida, Gainesville, Florida, Feb. 22, 2002;
Stanford Linear Accelerator Laboratory, California, Mar. 13, 2002;
University of California, Berkeley, California, Mar. 18, 2002.
- “Standard model in extra dimensions,”
Physics Department Colloquium at University of Utah, Salt Lake City, Utah, Apr. 5, 2001.
- “Strong CP problem and extra dimensions,”
Lawrence Berkeley National Laboratory, Berkeley, California. Apr. 4, 2001;
Stanford Linear Accelerator Center, Menlo Park, California, Apr 13, 2001;
University of Illinois at Chicago, Chicago, Illinois, Apr 25, 2001.
- “Standard Model in Extra Dimensions,”
University of Illinois at Chicago, Chicago, Illinois, Feb. 5, 2001;
University of Toronto, Toronto, Canada, Feb. 7, 2001;
University of British Columbia, Vancouver, Canada, Feb. 12, 2001.
- “Self-breaking of the Standard Model Gauge Symmetry,”
Center for Theoretical Science, Hsinchu, Taiwan, Dec. 15, 2000;
Academia Sinica, Taipei, Taiwan, Dec. 18, 2000;
National Taiwan University, Taipei, Taiwan, Dec. 27, 2000.
- “Composite Higgs and extra dimensions,”
Michigan State University, East Lansing, Michigan, Nov. 28, 2000.
- “Electroweak symmetry breaking from extra dimensions,”
National Chengkung University, Tainan, Taiwan. Dec. 30, 1999;
Academia Sinica, Taipei, Taiwan, Dec. 31, 1999;
National Taiwan University, Taipei, Taiwan, Jan. 13, 2000;
Lawrence Berkeley National Laboratory, Berkeley, California, Mar. 22, 2000;
University of Wisconsin, Madison, Wisconsin, May 19, 2000.
- “Lectures on extra dimensions 1–5”
presented between December 20, 1999 and January 14, 2000, at the NCTS Topical
Program “From Higgs to Supersymmetry”, National Center for Theoretical Science,
Hsinchu, Taiwan, August 1999 – May 2000.
- “Generic and chiral extensions of the supersymmetric standard model,”
University of Chicago, Chicago, Illinois, Jan. 6, 1999;
National Tsinghua University, Hsinchu, Taiwan, Feb. 24, 1999.
- “A chiral supersymmetric standard model,”
Johns Hopkins University, Baltimore, Maryland, Oct, 30, 1998;

University of Maryland, College Park, Maryland, Nov. 2, 1998;
William and Mary College, Williamsburg, Virginia, Nov. 5, 1998.

- “Duality in the presence of supersymmetry breaking,”
Fermilab, Batavia, Illinois, Jan. 15, 1998.
- “Superoblique corrections and precision SUSY measurements,”
SLAC, Menlo Park, California. Sep. 26, 1997;
National Tsinghua University, Hsinchu, Taiwan, Jan. 23, 1998;
National Taiwan University, Taipei, Taiwan, Feb. 13, 1998.
- “Probing lepton flavor Violation at the Next Linear Collider,”
Fermilab, Batavia, Illinois. Dec. 5, 1996;
Academia Sinica, Taipei, Taiwan, Jan. 6, 1997;
Purdue University, West Lafayette, Indiana, Jan. 13, 1997.
- “A supersymmetric theory of flavor with radiative fermion masses,”
University of California, Berkeley, California, Feb. 1996.

List of publications

1. “A spin-1 top partner,” H. Cai, H.-C. Cheng and John Terning . Jun 2008, arXiv:0806.0386 [hep-ph]
2. “Accurate mass determinations in decay chains with missing energy,” H.-C. Cheng, D. Engelhardt, J. F. Gunion, Z. Han and B. McElrath, to be published in *Phys. Rev. Lett.*, arXiv:0802.4290 [hep-ph].
3. “Little Higgs, non-standard Higgs, no Higgs and all that,” H.-C. Cheng, Proceedings of The 15th International Conference on Supersymmetry and Unification of Fundamental Interactions (SUSY07), Karlsruhe, Germany, 26 Jul – 1 Aug 2007, arXiv:0710.3407 [hep-ph].
4. “Mass determination in SUSY-like events with missing energy,” H.-C. Cheng, J. F. Gunion, Z. Han, G. Marandella and B. McElrath, *JHEP* **0712** 076 (2007), arXiv:0707.0030 [hep-ph].
5. “Dynamics of gravity in a Higgs phase,” N. Arkani-Hamed, H.-C. Cheng, M. A. Luty, S. Mukohyama and T. Wiseman, *JHEP* **0701** 036 (2007), arXiv:hep-ph/0507120.
6. “Little M-theory,” H.-C. Cheng, J. Thaler and L.-T. Wang, *JHEP*, **0609** 003 (2006), arXiv:hep-ph/0607205.
7. “Spontaneous Lorentz breaking at high energies,” H.-C. Cheng, M. A. Luty, S. Mukohyama and J. Thaler, *JHEP* **0605** 076 (2006), arXiv:hep-th/0603010.
8. “Top partners in little Higgs theories with T-parity,” H.-C. Cheng, I. Low and L.-T. Wang, *Phys. Rev.*, **D74** 055001 (2006), arXiv:hep-ph/0510225.
9. “Universal dynamics of spontaneous Lorentz violation and a new spin-dependent inverse-square law force,” N. Arkani-Hamed, H.-C. Cheng, M. Luty and J. Thaler, *JHEP* **0507**, 029 (2005), arXiv:hep-ph/0407034.
10. “Little hierarchy, little Higgses, and a little symmetry,” H.-C. Cheng and I. Low, *JHEP* **0408**, 061 (2004), arXiv:hep-ph/0405243.
11. “Ghost condensation and a consistent infrared modification of gravity,” N. Arkani-Hamed, H.-C. Cheng, M. A. Luty and S. Mukohyama, *JHEP* **0405**, 074 (2004), arXiv:hep-th/0312099.
12. “TeV symmetry and the little hierarchy problem,” H.-C. Cheng and I. Low, *JHEP* **0309**, 051 (2003), arXiv:hep-ph/0308199.

13. "Pseudonatural inflation," N. Arkani-Hamed, H.-C. Cheng, P. Creminelli and L. Randall, *JCAP* **0307**, 003 (2003), arXiv: hep-th/0302034.
14. "Extranatural inflation," N. Arkani-Hamed, H.-C. Cheng, P. Creminelli and L. Randall, *Phys. Rev. Lett.* **90**, 221302 (2003), arXiv: hep-th/0301218.
15. "Kaluza-Klein dark matter," H.-C. Cheng, J. L. Feng and K. T. Matchev, *Phys. Rev. Lett.* **89**, 211301 (2002), arXiv:hep-ph/0207125.
16. "Universal extra dimensions at the e- e- colliders," H.-C. Cheng, presented at 4th International Workshop on Electron-Electron Interactions at TeV Energies (e- e- 01), Santa Cruz, California, 7-9 Dec 2001, arXiv:hep-ph/0206035.
17. "Bosonic supersymmetry? Getting fooled at the LHC," H.-C. Cheng, K. T. Matchev and M. Schmaltz, *Phys. Rev.* **D66**, 056006 (2002), arXiv:hep-ph/0205314.
18. "Radiative corrections to Kaluza-Klein masses," H.-C. Cheng, K. T. Matchev and M. Schmaltz, *Phys. Rev.* **D66**, 036005 (2002), arXiv:hep-ph/0204342.
19. "The beyond the standard model working group: Summary report," G. Azuelos *et al.*, to appear in the proceedings of Workshop on Physics at TeV Colliders, Les Houches, France, 21 May - 1 Jun 2001. arXiv:hep-ph/0204031.
20. "GUT breaking on the lattice," H.-C. Cheng, K. T. Matchev and J. Wang, *Phys. Lett.* **B521**, 308 (2001), arXiv:hep-ph/0107268.
21. "Linear collider physics resource book for Snowmass 2001," T. Abe *et al.* [American Linear Collider Working Group Collaboration], SLAC-570.
22. "Deconstructing gaugino mediation," H.-C. Cheng, D. E. Kaplan, M. Schmaltz and W. Skiba, *Phys. Lett* **B515**, 395 (2001), arXiv:hep-ph/0106098.
23. "Dynamical electroweak breaking and latticized extra dimensions," H.-C. Cheng, C. T. Hill and J. Wang, *Phys. Rev.* **D64**, 095003 (2001), arXiv:hep-ph/0105323.
24. "The standard model in the latticized bulk," H.-C. Cheng, C. T. Hill, S. Pokorski and J. Wang, *Phys. Rev.* **D64**, 065007 (2001), arXiv:hep-th/0104179.
25. "Axions and a gauged Peccei-Quinn symmetry," H.-C. Cheng and D. E. Kaplan, arXiv:hep-ph/0103346.
26. "Electroweak symmetry breaking and extra dimensions," H.-C. Cheng, presented at 5th International Linear Collider Workshop (LCWS 2000), Fermilab, Batavia, Illinois, 24-28 Oct 2000, arXiv:hep-ph/0012263.
27. "Bounds on universal extra dimensions," T. Appelquist, H.-C. Cheng, B. A. Dobrescu, *Phys. Rev.* **D64**, 035002 (2001), arXiv:hep-ph/0012100.

28. “Minimal electroweak symmetry breaking model in extra dimensions,” H.-C. Cheng, presented at The Meeting of The Division of Particles and Fields of The American Physical Society (DPF2000), August 9-12, 2000, The Ohio State University, Columbus, Ohio, arXiv:hep-ph/0011061.
29. “Self-breaking of the standard model gauge symmetry,” N. Arkani-Hamed, H.-C. Cheng, B. A. Dobrescu and L. J. Hall, *Phys. Rev.* **D62**, 096006 (2000), arXiv:hep-ph/0006238.
30. “Electroweak symmetry breaking by extra dimensions,” H.-C. Cheng, B. A. Dobrescu and C. T. Hill, presented at The 7th International Symposium on Particles, Strings and Cosmology (PASCOS99), Granlibakken, Lake Tahoe, California December 10-16, 1999, arXiv:hep-ph/0004072.
31. “Report of mSUGRA working group for Run II of the Tevatron,” S. Abel et al., arXiv:hep-ph/0003154.
32. “Electroweak symmetry breaking and extra dimensions,” H.-C. Cheng, B. A. Dobrescu and C. T. Hill, *Nucl. Phys.* **B589**, 249 (2000), arXiv:hep-ph/9912343.
33. “New Higgs signals from flavor physics in large extra dimensions,” H.-C. Cheng and K. T. Matchev, *Nucl. Phys.* **B563**, 21 (1999), arXiv:hep-ph/9908328.
34. “Gauge coupling unification with extra dimensions and gravitational scale effects,” H.-C. Cheng, B. A. Dobrescu and C. T. Hill, *Nucl. Phys.* **B573**, 597 (2000), arXiv:hep-ph/9906327.
35. “Doublet-triplet splitting and fermion masses with extra dimensions,” H.-C. Cheng, *Phys. Rev.* **D60**, 075015 (1999), arXiv:hep-ph/9904252.
36. “Generic and chiral extensions of the supersymmetric standard model,” H.-C. Cheng, B. A. Dobrescu, and K. T. Matchev, *Nucl. Phys.* **B543**, 47 (1999), arXiv:hep-ph/9811316.
37. “A chiral supersymmetric standard model,” H.-C. Cheng, B. A. Dobrescu, and K. T. Matchev, *Phys. Lett.* **B439**, 301 (1998), arXiv:hep-ph/9807246.
38. “Duality after supersymmetry breaking,” Y. Shadmi and H.-C. Cheng, presented by Y. Shadmi at 33rd Rencontres de Moriond: Electroweak Interactions and Unified Theories, Mar. 14-21, 1998, Les Arcs, arXiv:hep-th/9806076.
39. “Duality in the presence of supersymmetry breaking,” H.-C. Cheng, Y. Shadmi, *Nucl. Phys.* **B531**, 125 (1998), arXiv:hep-th/9801146.
40. “Precision SUSY measurements at the e^-e^- collider,” H.-C. Cheng, presented at 2nd International Workshop on Electron-Electron Interactions at TeV Energies, Sep. 22-24, 1997, University of California, Santa Cruz, arXiv:hep-ph/9801234, Published in *Int. J. Mod. Phys.* **A13**, 2329-2336 (1998), Editor: C. A. Heusch.

41. “Flavor and CP violations from sleptons at the muon collider,” H.-C. Cheng, presented at Workshop on Physics at the First Muon Collider and at the Front End of a Muon Collider, Nov. 6-9, 1997, Fermilab, Batavia, Illinois, arXiv:hep-ph/9712427, Published in *AIP Conference Proceedings 435*, p. 561, Editors: S. H. Geer and R. Raja.
42. “Signatures of multi-TeV scale particles in supersymmetric theories,” H.-C. Cheng, J. L. Feng, and N. Polonsky, *Phys. Rev.* **D57**, 152 (1998), arXiv:hep-ph/9706476.
43. “Superoblique corrections and nondecoupling of supersymmetry breaking,” H.-C. Cheng, J. L. Feng, and N. Polonsky, *Phys. Rev.* **D56**, 6875 (1997), arXiv:hep-ph/9706438.
44. “Supersymmetric lepton flavor violation at the NLC,” H.-C. Cheng, presented at Symposium on Flavor-Changing Neutral Currents: Present and Future Studies (FCNC 97), Feb. 19-21, 1997, Santa Monica, California, arXiv:hep-ph/9704289, Published in Proceedings of the Symposium on Flavor-Changing Neutral Currents: Present and Future Studies, p. 219, Editor: D. B. Cline.
45. “CP violation from slepton oscillations at the LHC and NLC,” N. Arkani-Hamed, H.-C. Cheng, J. L. Feng, and L. J. Hall, *Nucl. Phys.* **B505**, 3 (1997), arXiv:hep-ph/9704205.
46. “Supersymmetric dynamical generation of the grand unification scale,” H.-C. Cheng, *Phys. Lett.* **B410**, 45 (1997), arXiv:hep-ph/9702214.
47. “Nonunified gaugino masses in supersymmetric missing partner models with hypercolor,” N. Arkani-Hamed, H.-C. Cheng, and T. Moroi, *Phys. Lett.* **B387**, 529 (1996), arXiv:hep-ph/9607463.
48. “Probing lepton flavor violation at future colliders,” N. Arkani-Hamed, H.-C. Cheng, J. L. Feng, and L. J. Hall, *Phys. Rev. Lett.* **77**, 1937 (1996), arXiv:hep-ph/9603431.
49. “A supersymmetric theory of flavor with radiative fermion masses,” N. Arkani-Hamed, H.-C. Cheng, and L. J. Hall, *Phys. Rev.* **D54**, 2242 (1996), arXiv:hep-ph/9601262.
50. “A new supersymmetric framework for fermion mass,” N. Arkani-Hamed, H.-C. Cheng, and L. J. Hall, *Nucl. Phys.* **B472**, 95 (1996), arXiv:hep-ph/9512302.
51. “Flavor mixing signals for realistic supersymmetric unification,” N. Arkani-Hamed, H.-C. Cheng, and L. J. Hall, *Phys. Rev.* **D53**, 413 (1996), arXiv:hep-ph/9508288.
52. “Squark and slepton mass relations in grand unified theories,” H.-C. Cheng and L. J. Hall, *Phys. Rev.* **D51**, 5289 (1995), arXiv:hep-ph/9411276.
53. “SO(10) operator analysis for $\nu_\mu \nu_\tau$ oscillations,” H.-C. Cheng, M. S. Gill, and L. J. Hall, *Phys. Rev.* **D49**, 4826 (1994), arXiv:hep-ph/9307275.