Curriculum Vitae: Gary Shiu

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University of Wisconsin
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Education

Ph.D., Cornell University, Physics Dissertation Title: Type I String Compactifications	Aug 1998
B.S. (First Class Honors), Chinese University of Hong Kong, Physics	June 1993

Academic Positions

University of Wisconsin, Madison	Associate Professor	2006-
	Assistant Professor	2002-2006
University of Pennsylvania	Senior Research Associate	2000-2002
Institute for Theoretical Physics, Stony Brook	Research Associate	1998-2000

Honors and Awards

Kavli Frontiers Fellow, National Academy of Sciences	2006
Cottrell Scholar Award	2005-2010
NSF CAREER Award	2004-2009
Research Corporation Innovation Award	2003-2008
Hsien Wu and Daisy Yen Wu Fellowship (from Cornell University)	1996-1997
Joyce M. Kuok Foundation Fellowship	1990-1997
Sir Run Run Shaw Postgraduate Fellowship	1993-1994
Chinese University Endowment Fellowship and Distinguished Student Award	1990-1993
Mrs. Ho Kwai Wing Distinguished Student Award	1992-1993
Lim Por Yen Scholarship	1991-1992
Mrs. Ng Chu Lien Fan Prize	1990-1991
Y.C. Liang Scholarship	1990-1991

Summer and Short-Term Positions

CERN	July 2001, July 2004
Kavli Institute for Theoretical Physics, UC Santa Barbara	May 2000, Jan 2002
	Nov – Dec 2002, Aug 2006
Michigan Center for Theoretical Physics	April 2002, May 2004
Perimeter Institute for Theoretical Physics	January – June, 2005
New High Energy Theory Center, Rutgers University	April 2007
Kavli Institute for Theoretical Physics, China	September 2007

Current Research Grants

- Cottrell Scholar Award: "Connecting String Theory to Experiment"
  Single PI, Total Award Amount of $100,000 for the period 06/05-05/10.
- NSF CAREER Award: "Research in Superstring Phenomenology"
  Single PI, Total Award Amount of $400,000 for the period 03/04-02/09.
- Research Corporation Innovation Award: "Testing String Theory from the Sky: Cosmological Probes of Quantum Gravity"
  Single PI, Total Award Amount of $35,000 for the period 05/03-04/08.
- DOE Grant of the High Energy Program at UW-Madison,
  Task D "String Theory", Co-PI (with A. Klemm and A. Hashimoto)
  Award Amount of $600,000 for the period 11/04 - 10/07.

Professional Service

- International Advisory Committee, Sixth International Conference on String Phenomenology, INFN Frascati National Laboratories, Rome, Italy, June 4-8, 2007.
- Co-organizer, Winter Workshop on Strings, Zhejiang University, Hangzhou, China, Dec 27–31, 2005.
- Co-organizer, LHC Olympics, CERN, Geneva, July 25–26, 2005.
- Co-organizer of the String Phenomenology Workshop hosted by the Perimeter Institute, March-April, 2005.
- International Advisory Committee, Third International Conference on String Phenomenology, University of Michigan, Ann Arbor, August 2004.
- Convenor of the "String Phenomenology and the Brane World" session of 11-th International Conference on Supersymmetry (SUSY 2003), Tucson, Arizona.

- Referee for Physical Review Letters, Physical Review D, Nuclear Physics B, Physics Letters B, Classial and Quantum Gravity, Journal of High Energy Physics, International Journal of Modern Physics, Modern Physics Letters A, Journal of Cosmology and Astroparticle Physics, and Astrophysical Journal.
- Grant Proposals Reviewer for NSF, DOE, NSERC, Research Corporation, CUNY, FOM (Netherlands Foundation for Fundamental Research on Matter).

Advisees

Postdoctoral Researchers

Lian-Tao Wang (co-advised)	Sept. 2002 – Aug. 2004	Currently Assistant Prof. at Princeton
Fernando Marchesano	Sept. 2003 – Aug. 2005	Currently postdoc at Munich Starting Sept. 2007, CERN fellow
Min-xin Huang	Sept. 2004 – present	PhD (UPenn), 2004 Starting Sept. 2007, CERN fellow

Graduate Students

Ioannis Papadimitriou (at UPenn)	PhD date: August 2005. Currently postdoc at DESY
John Maiden	PhD date: August 2006. Founder of phdfusion.com
Bret Underwood	Expected PhD date: August 2008
Steven Kecskemeti	Expected PhD date: August 2009

Undergraduate thesis supervised

Joel Meyers Senior thesis *"Cosmic Superstrings"* BS, University of Wisconsin (2006)

Currently PhD student at the University of Texas, Austin.

Teaching Activities

Semester	**Course**	**Student Evaluation** (on a 1-5 scale)
Fall 06	PHY 247: A Modern Introduction to Physics I	4.34
Spring 06	PHY 248: A Modern Introduction to Physics II	4.21
Fall 05	PHY 247: A Modern Introduction to Physics I	4.38
Fall 04	PHY 322: Electromagnetism	4.22
Spring 04	PHY 322: Electromagnetism	4.28
Fall 03	PHY 805: String Theory II	4.03
Spring 03	PHY 805: String Theory I	4.35
Fall 02	PHY 711: Graduate Mechanics	4.21

Invited Talks

Public Lectures and Lectures at Schools

- Five Lectures on *"String Theory and Cosmology,"* Asian Winter School on Strings, Kutsasu, Japan, January 15-25, 2008 (to be given).
- Four Lectures on *"String Phenomenology,"* Perimeter Summer School, Perimeter Institute for Theoretical Physics, Waterloo, Canada, August 6-18, 2007 (to be given).
- Five Lectures on *"String Phenomenology,"* 20-th Taiwan Spring School on Particles and Fields, Department of Physics, National Taiwan University, Taipei, Taiwan, April 1-4, 2007 (to be given).
- Distinguished Lecture on *"Space, Time, and String Theory",* Hong Kong University of Science and Technology, Hong Kong, January 13, 2007.
- *"How many dimensions does the universe have?",* Kavli Frontiers of Science Symposium, National Academy of Sciences, Beckman Center in Irvine, CA, Nov 2 - 4, 2006.
- Two Lectures on *"String Model Construction for the Real World,"* Summer Institute 2006 on Particle Physics and Cosmology, Asia Pacific Center for Theoretical Physics (APCTP), Postech, Pohang, Korea, August 23 - 29, 2006.
- Two Lectures on String Phenomenology and Cosmology, 19-th Nordic Meeting on *"Strings, Fields, and Branes"*, Uppsala, Sweden, November 18-20, 2004.
- Five Lectures on String Cosmology, XI Mexican School of Particles and Fields, Universidad Veracruzana, Xalapa, Mexico, August 2-13, 2004.

Conference Plenary Talks

- New Ideas in String Inflation

  Sixth International Conference on String Phenomenology

  INFN Frascati National Laboratory, Rome, June 4-8, 2007 (to be given).

- Realistic String Model Building

  PASCOS-06 12-th International Symposium on Particles, Strings, and Cosmology

  Ohio Center for Technology and Science, Columbus, Ohio, Sep 10-15, 2006.

- Brane Inflation: Observational Signatures and Non-Gaussianities

  Fifth International Conference on String Phenomenology

  Kavli Institute for Theoretical Physics, UC Santa Barbara, Aug 28-Sep 1, 2006.

- Progress and Prospects of String Cosmology
  The Fifth International Overseas Chinese Physicists Meeting
  Taipei, Taiwan, June 27-June 30, 2006.
- Toward Realistic String Models of Particle Physics and Cosmology
  New Directions Beyond the Standard Model in Field and String Theory
  Galileo Galilei Institute for Theoretical Physics, Arcetri, Florence, May 26, 2006.
- The Promise of String Phenomenology
  Dutch National High Energy Physics Seminar
  NIKHEF, Amsterdam, May 19, 2006.
- Observational Signatures and Non-Gaussianities of String Inflation
  Frontiers in String Theory Workshop
  Banff International Research Station, Canada, Feb 11-16, 2006.
- String Phenomenology
  Hangzhou Workshop on Strings
  Center of Mathematical Sciences, Zhejiang University, China, Dec 28, 2005.
- Discussion on Moduli Stabilization and the String Landscape
  Strings and the Real World Workshop
  Ohio Center for Technology and Science, Columbus, Ohio, Nov 7-9, 2005.
- The Standard Model and Beyond from String Theory
  Progress in Theoretical Physics – beyond the hierarchy of the Standard Model
  Yukawa Institute for Theoretical Physics, Kyoto University, June 20-24, 2005.
- Towards Realistic Flux Vacua
  Fourth International Conference on String Phenomenology
  Ludwig-Maximilians-Universität Müchen, Munich, Germany, June 13-18, 2005.
- Building MSSM Flux Vacua
  PASCOS-05, 11th International Symposium on Particles, Strings and Cosmology
  Gyeongju, Korea, May 30-June 4, 2005.
- Searching for Realistic Vacua in the String Landscape
  5-th Northeast String Cosmology Meeting
  ISCAP, Columbia University, New York, May 13, 2005.

- Inflation as a Probe of String Scale Physics

  String Cosmology Workshop, Nordic Institute for Theoretical Physics,

  Uppsala University, Uppsala, Sweden, April 25-28, 2005.

- Inflation as a Probe of Quantum Gravity

  Quantum Gravity Phenomenology, Mitchell Institute for Fundamental Physics

  Texas A & M University, College Station, TX, April 3-30, 2005.

- What is String Phenomenology?

  Perimeter/U of T/CITA Mini-Workshop (CIAR Cosmology & Gravity Focus Group)

  Perimeter Institute for Theoretical Physics, Waterloo, Canada, April 11, 2005.

- Building Chiral Flux Vacua

  Workshop on $\mathcal{N} = 1$ Compactifications, Fields Institute

  University of Toronto, Toronto, Canada, March 21-25, 2005.

- Building MSSM Flux Vacua

  Frontier Workshop, William I. Fine Theoretical Physics Institute

  University of Minnesota, Minneapolis, MN, Oct 17, 2004.

- MSSM vacua from Flux Compactifications

  Strings and the Real World

  Aspen Center for Physics, Colorado, Aug 27, 2004.

- Model Building and Phenomenology of Flux-Induced Supersymmetry Breaking

  Third International Conference on String Phenomenology

  University of Michigan, Ann Arbor, Michigan, Aug 1-6, 2004.

- Inflation as a Probe of String Scale Physics

  Strings at CERN Conference

  CERN, Geneva, July 5-7, 2004.

- Testing String Theory from the Sky: Cosmological Probes of Quantum Gravity

  COSPA 2003 Symposium

  National Taiwan University, Taipei, Nov 13-15, 2003.

- Probing Strings from the Sky

  Second International Conference on String Phenomenology

  U. Durham, UK, July 29- August 4, 2003.

- Tachyon Dynamics and Brane Cosmology

  IFT Miniworkshop on D-brane Model Building

  Universidad de Autonoma, Madrid, March 13-14, 2003.

- (Re)constructing Dimensions

  Aspen 2003 Winter Conference: "At the Frontiers of Particle Physics"

  Aspen Center for Physics, CO, Jan 19 – 25, 2003.

- Probing Strings from the Sky

  KITP Workshop on "The New Cosmology Confronts Observation: The Cosmic Microwave Background, Dark Matter, Dark Energy, and Brane Worlds"

  UC Santa Barbara, CA, August 12 – December 20, 2002.

- Probing Strings and Tachyon Dynamics from the Sky

  Amsterdam Summer Workshop on "String Theory and Quantum Gravity"

  University of Amsterdam, July 22– August 2, 2002.

- Tachyon Dynamics and Brane Cosmology

  First International Conference on String Phenomenology

  University of Oxford, UK, July 6 – 11, 2002.

- Standard Model from Orientifolds and G_2 Manifolds

  Workshop on "Physics and Mathematics of Extra Dimensions"

  University of Michigan, Ann Arbor, April 15 – May 3, 2002.

- Standard Model from String Theories

  PHENO 2002 Symposium

  University of Wisconsin, Madison, April 22 – 24, 2002.

- Recent Developments in M Physics

  Third International Chinese Physicists Meeting

  Chinese University of Hong Kong, August 1, 2000.

- Brane World in String Theory

  "New Ideas in Particle Physics and Cosmology" Conference

  University of Pennsylvania, Philadelphia, May 19-22, 1999.

- Brane World

  OCPA Conference on "Recent Advances and Cross-Century Outlooks in Physics: Interplay between Theory and Experiment", Atlanta, March 18-20, 1999.

Other Conference Presentations

- Progress in String Phenomenology
  American Physical Society April Meeting, Philadelphia, PA, April 5-8, 2003.
- Tachyon Dynamics and Brane Cosmology
  COSMO-02, Chicago, IL, September 18–21, 2002.
- Stringy Signatures across the Sky
  Philadelphia Area Astrophysics meeting, Drexel University, November 3, 2001.
- Cosmological Signatures of Brane Inflation
  "M-Theory Cosmology", Cambridge University, UK, August 20-25, 2001.
- Brane World and Extra Dimensions
  SUSY 99, Fermilab, June 14-19, 1999.
- Grand Unified String Theories
  Montreal-Rochester-Syracuse-Toronto Meeting (MRST 97)
  Syracuse University, May 12–13, 1997.
- Non-Abelian Orbifolds and Free Fermionic Construction
  Montreal-Rochester-Syracuse-Toronto Meeting (MRST 96)
  University of Toronto, May 9–10, 1996.

Colloquia

- Strings and the Real World
  Dept. of Physics, University of Kansas, Lawrence, KS, December 6, 2004.
- Testing String Theory from the Sky: Cosmological Probes of Quantum Gravity
  Joint Experimental-Theory Colloquium
  Fermi National Laboratory, Batavia, IL, February 27, 2004.
- String Theory Confronts Experiment: An Introduction to the Brane World
  Dept. of Physics, McGill University, Montreal, Canada, March 5, 2002.
- Particle Physics and Cosmology from String Theory
  Dept. of Physics, University of Wisconsin, Madison, WI, February 28, 2002.

- String Theory Confronts Experiment: An Introduction to the Brane World
  Dept. of Physics, Simon Fraser University, Vancouver, BC, February 19, 2002.
- String Theory Confronts Experiment: An Introduction to the Brane World
  Dept. of Physics, University of Colorado, Boulder, CO, February 13, 2002.
- Strings, Branes and Cosmology
  Dept. of Physics and Astronomy, U. North Carolina
  Chapel Hill, NC, September 10, 2001.
- The Physics of Extra Dimensions
  Dept. of Physics and Astronomy, U. Missouri, St. Louis, MO, October 6, 2000.

Research Seminars

- 04/2007 New Center for High Energy Theory, Rutgers University
- 03/2007 Mitchell Institute for Fundamental Physics, Texas A&M University
- 03/2007 McGill University
- 02/2007 Princeton University
- 02/2007 Michigan Center for Theoretical Physics, University of Michigan, Ann Arbor
- 09/2006 Joint Theory Seminar, Harvard University
- 08/2006 Kavli Institute for Theoretical Physics, UC Santa Barbara
- 06/2006 National Taiwan University
- 04/2006 University of Cincinnati
- 02/2006 University of Chicago
- 01/2005 Mitchell Institute for Fundamental Physics, Texas A&M University
- 10/2004 Institute for Fundamental Theory, University of Florida, Gainesville
- 10/2004 Weinberg Theory Group, University of Texas, Austin
- 09/2004 University of Illinois, Urbana-Champaign
- 02/2004 Michigan Center for Theoretical Physics, University of Michigan, Ann Arbor
- 04/2003 Carnegie Mellon University

- 11/2002 Kavli Institute for Theoretical Physics, UC Santa Barbara
- 11/2002 Weinberg Theory Group, University of Texas, Austin
- 11/2002 University of Wisconsin, Milwaukee
- 04/2002 Michigan Center for Theoretical Physics, University of Michigan, Ann Arbor
- 02/2002 University of Colorado, Boulder
- 01/2002 Kavli Institute for Theoretical Physics, UC Santa Barbara
- 11/2001 Bartol Research Institute, University of Delaware
- 11/2001 University of Maryland
- 10/2001 Syracuse University
- 10/2001 Institute for Strings, Cosmology, and Astroparticle Physics, Columbia Univ.
- 10/2001 Institute for Advanced Study, Princeton
- 10/2001 Cornell University
- 03/2001 Institute for Advanced Study, Princeton
- 03/2001 Cornell University
- 03/2000 C.N. Yang Institute for Theoretical Physics, Stony Brook
- 02/2000 University of Pennsylvania
- 09/1999 University of Wisconsin, Madison
- 09/1999 Michigan Center for Theoretical Physics, University of Michigan, Ann Arbor
- 09/1999 Yale University
- 03/1999 University of Rochester
- 03/1999 University of Toronto
- 02/1999 University of Pennsylvania
- 02/1999 Duality Seminar, Harvard University
- 11/1998 Stanford Linear Accelerator Center (SLAC)
- 11/1998 University of California, Berkeley
- 11/1998 Kavli Institute for Theoretical Physics, UC Santa Barbara
- 11/1998 Caltech

- 10/1998 Johns Hopkins University
- 09/1998 C.N. Yang Institute for Theoretical Physics, Stony Brook
- 03/1998 Abdus Salam International Center for Theoretical Physics (ICTP), Trieste
- 05/1996 Cornell University

Outreach

- Research featured in media including the New Scientist, Physics Web (Institute of Physics), Wisconsin State Journal, Daily Cardinal, University of Wisconsin News, February 2007.
- Wonders of Physics Lab Tour, February, 2007; February 2006.
- Delivered a public lecture "Space, Time, and String Theory" for high school students at the Hong Kong University of Science and Technology, January 13, 2007.
- "Strings and our Universe", a presentation of string theory to amateur astonomers, Madison Astronomical Society, February 10, 2006.
- Together with graduate student Bret Underwood, participated in the Eagle School Science Mentor program in 2005-2006.
- Faculty profile and interview, inaugural issue of the Wisconsin Undergraduate Journal of Science (WISCI), Fall 2005.
- Helped organized the public lecture on "String Theory" by Prof. Brian Greene, Distinguished Lecture Series, University of Wisconsin, December 13, 2005.
- Commentator for the Nova program "The Elegant Universe" on Wisconsin Public TV, March 8, 2005; December 6, 2005.
- WORT Radio Interview, February 3, 2005.
- Interview in News Focus article, "String Theory Gets Real", Science Magazine, Vol 306, November 26, 2004.
- Research featured in News Scan article "A Pixelated Cosmos", Scientific American, October 2002.

Publications List: Gary Shiu

Refereed Publications

(Total published paper: 50; Total citations over 3200; Top cited single paper over 360 citations; h-index=29; as of 02/2007 from SPIRES)

1. Exact spectrum of scalar field perturbations in a radiation deformed closed de Sitter Universe (with S. Sarangi, K. Schalm, and J.P. van der Schaar), hep-th/0611277, accepted for publication in JCAP.

2. Vacuum Sampling in the Landscape during Inflation (with H. Davoudiasl and S. Sarangi), hep-th/0611232, submitted to Phys Lett. B.

3. The Inflationary Trispectrum for Models with Large Non-Gaussianities (with M. Huang), Phys. Rev. D **74**, 121301 (2006) (rapid communication) [arXiv:hep-th/0610235].

4. Observing the Geometry of Warped Compactification via Cosmic Inflation (with B. Underwood), Phys. Rev. Lett. **98**, 051301 (2007) [arXiv:hep-th/0610151].

5. DBI Inflation in the Tip Region of a Warped Throat (with S. Kecskemeti, J. Maiden, B. Underwood), JHEP **0609**, 076 (2006) [arXiv:hep-th/0605189].

6. Observational Signatures and Non-Gaussianities of General Single Field Inflation (with X. Chen, M. Huang, S. Kachru), JCAP **0701**, 002 (2007) [arXiv:hep-th/0605045].

7. D-brane Spectrum and K-theory constraints of $D = 4$, $\mathcal{N} = 1$ Orientifolds (with J. Maiden, B. Stefanski), JHEP **0604**, 052 (2006) [arXiv:hep-th/0602038].

8. Warped Reheating in Multi-Throat Brane Inflation (with D. Chialva and B. Underwood), JHEP **0601**, 014 (2006) [arXiv:hep-th/0508229].

9. Toward Realistic Intersecting D-brane Models (with R. Blumenhagen, M. Cvetic, and P. Langacker), Ann. Rev. Nucl. Part. Sci. **55**, 71 (2005) [arXiv:hep-th/0502005].

10. Chiral D-brane Models with Frozen Open String Moduli (with R. Blumenhagen, M. Cvetic, and F. Marchesano), JHEP **0503**, 050 (2005) [arXiv:hep-th/0502095].

11. The Cosmological Vacuum Ambiguity, Effective Actions, and Transplanckian Effects in Inflation (with K. Schalm and J.P. van der Schaar), AIP Conf. Proc. **743**, 362 (2005) [arXiv:hep-th/0412288].

12. Decoupling in an Expanding Universe: Backreaction barely constrains Short-distance Effects in the CMB (with B.R. Greene, K. Schalm, and J.P. van der Schaar), JCAP **0502**, 001 (2005) [arXiv:hep-th/0411217].

13. Model Building and Phenomenology of Flux-Induced Supersymmetry Breaking on D3-branes (with F. Marchesano and L. Wang), Nucl. Phys. B **712**, 20 (2005) [arXiv:hep-th/0411080].

14. Building MSSM Flux Vacua (with F. Marchesano), JHEP **0411**, 041 (2004) [arXiv:hep-th/0409132].

15. MSSM vacua from Flux Compactifications (with F. Marchesano), Phys. Rev. D **71**, 011701 (2005) (rapid communication) [arXiv:hep-th/0408059].

16. Decoupling in an Expanding Universe: Boundary Renomalization Group Flow affects Initial Conditions for Inflation (with K. Schalm and J.P. van der Schaar), JHEP **0404**, 076 (2004) [arXiv:hep-th/0401164].

17. D-Matter (with L. Wang), Phys. Rev. D **69**, 126007 (2004) [arXiv:hep-ph/0311228].

18. Running of the Scalar Spectral Index from Inflationary Models (with D.J.H. Chung and M. Trodden), Phys. Rev. D **68**, 063501 (2003) [arXiv:astro-ph/0305193].

19. Supersymmetric Three Family SU(5) Grand Unified Models from Type IIA Orientifolds with Intersecting D6-branes (with M. Cvetic and I. Papadimitriou), Nucl. Phys. B **659**, 193 (2003) [arXiv:hep-th/0212177].

20. (Re)constructing Dimensions (with R. Rabadan), JHEP **0305**, 045 (2003) [arXiv:hep-th/0212144].

21. On the Hagedorn Behavior of PP-wave Strings and N=4 SYM Theory at Finite R-Charge Density (with B.R. Greene and K. Schalm), Nucl. Phys. B **652**, 105 (2003) [arXiv:hep-th/0208163].

22. Rolling tachyon in brane world cosmology from superstring field theory (with S. H. H. Tye and I. Wasserman), Phys. Rev. D **67**, 083517 (2003) [arXiv:hep-th/0207119].

23. A three-family standard-like orientifold model: Yukawa couplings and hierarchy (with M. Cvetič and P. Langacker), Nucl. Phys. B **642**, 139 (2002) [arXiv:hep-th/0206115].

24. Phenomenology of a three-family standard-like string model (with M. Cvetič and P. Langacker), Phys. Rev. D **66**, 066004 (2002) [arXiv:hep-ph/0205252].

25. Cosmological constraints on tachyon matter (with I. Wasserman), Phys. Lett. B **541**, 6 (2002) [arXiv:hep-th/0205003].

26. A generic estimate of trans-Planckian modifications to the primordial power spectrum in inflation (with R. Easther, B.R. Greene and W.H. Kinney), Phys. Rev. D **66**, 023518 (2002) [arXiv:hep-th/0204129].

27. On the signature of short distance scale in the cosmic microwave background (with I. Wasserman), Phys. Lett. B **536**, 1 (2002) [arXiv:hep-th/0203113].

28. Chiral type II orientifold constructions as M theory on G(2) holonomy spaces (with M. Cvetic and A. M. Uranga), Published in *Dubna 2001, Supersymmetry and unification of fundamental interactions* 317-326 [arXiv:hep-th/0111179].

29. Imprints of Short Distance Physics On Inflationary Cosmology (with R. Easther, B.R. Greene, and W.H. Kinney), Phys. Rev. D **67**, 063508 (2003) [arXiv:hep-th/0110226].

30. On Type II Superstrings in Less Than Four Dimensions (with J. Erler), Phys. Lett. B **521**, 114 (2001) [arXiv:hep-th/0108230].

31. Chiral 4-Dimensional N=1 Supersymmetric Type IIA Orientifolds from Intersecting D6-branes (with M. Cvetic and A.M. Uranga), Nucl. Phys. B **615**, 3 (2001) [arXiv:hep-th/0107166].

32. Three Family Supersymmetric Standard-like Models From Intersecting Brane Worlds (with M. Cvetic and A.M. Uranga), Phys. Rev. Lett. **87**, 201801 (2001) [arXiv:hep-th/0107143].

33. Some Aspects of Brane Inflation (with S.H.H. Tye), Phys. Lett. B **516**, 421 (2001) [arXiv:hep-th/0106274].

34. Inflation as a Proble of Short Distance Physics (with R. Easther, B.R. Greene, and W.H. Kinney), Phys. Rev. D **64**, 103502 (2001) [arXiv:hep-th/0104102].

35. Remarks on Inflation and Noncommutative Geometry (with C.S. Chu and B.R. Greene), Mod. Phys. Lett. A **16**, 2231 (2001) [arXiv:hep-th/0011241].

36. Dynamical Topology Change in M Theory (with B.R. Greene and K. Schalm), J. Math. Phys. **42**, 3171 (2001) [arXiv:hep-th/0010207].

37. Warped Compactifications in M and F Theory (with B.R. Greene and K. Schalm), Nucl. Phys. B **584**, 480 (2000) [arXiv:hep-th/0004103].

38. Anomaly Cancellations in Orientifolds with Quantized B Flux (with A. Buchel and S.H.H. Tye), Nucl. Phys. B **569**, 329 (2000) [arXiv:hep-th/9907203].

39. Collider Signatures from the Brane World (with R. Shrock and S.H.H. Tye), Phys. Lett. B **458**, 274 (1999) [arXiv:hep-ph/9904262].

40. Bose-Fermi Degeneracy and Duality in Non-Supersymmetric Strings (with S.H.H. Tye), Nucl. Phys. B **542**, 45 (1999) [arXiv:hep-th/9808095].

41. TeV Scale Superstring and Extra Dimensions (with S.H.H. Tye), Phys. Rev. D **58**, 106007 (1998) [arXiv:hep-th/9805157].

42. Type IIB Orientifolds, F theory, Type I Strings on Orbifolds and Type I - Heterotic Duality (with Z. Kakushadze and S.H.H. Tye), Nucl. Phys. B **533**, 25 (1998) [arXiv:hep-th/9804092].

43. Type IIB Orientifolds with NS–NS Antisymmetric Tensor Backgrounds (with Z. Kakushadze and S.H.H. Tye), Phys. Rev. D **58**, 086001 (1998) [arXiv:hep-th/9803141].

44. A Review of Three-Family Grand Unified String Models (with Z. Kakushadze, S.H.H. Tye, and Y. Vtorov-Karevsky), Int. J. Mod. Phys. A **13**, 2551 (1998) [arXiv:hep-th/9710149].

45. 4D Chiral N=1 Type I Vacua with and without D5-branes (with Z. Kakushadze), Nucl. Phys. B **520**, 75 (1998) [arXiv:hep-th/9706051].

46. A Chiral N=1 Type I Vacuum and its Heterotic Dual (with Z. Kakushadze), Phys. Rev. D **56**, 3686 (1997) [arXiv:hep-th/9705163].

47. Phenomenology of Three-Family Grand Unified String Models (with Z. Kakushadze, S.H.H. Tye, and Y. Vtorov-Karevsky), Phys. Lett. B **408**, 173 (1997) [arXiv:hep-ph/9705202].

48. Couplings in Asymmetric Orbifolds and Grand Unified String Models (with Z. Kakushadze and S.H.H. Tye), Nucl. Phys. B **501**, 547 (1997) [arXiv:hep-th/9704113].

49. Asymmetric Non-Abelian Orbifolds and Model Building (with Z. Kakushadze and S.H.H. Tye), Phys. Rev. D **54**, 7545 (1996) [arXiv:hep-th/9607137].

50. Study of Quantum Anharmonic Oscillators by State-Dependent Diagonalization (with K.C. Ho, Y.T. Liu, C.F. Lo, K.L. Liu, and W.M. Kwok), Phys. Rev. **A53** (1996) 1280.

Invited Review Articles

1. "Towards Realistic Brane World" (with R. Blumenhagen, M. Cvetic, P. Langacker), hep-th/0502005, published in Vol 55 of Annual Reviews of Nuclear and Particle Sciences, December, 2005.
2. "Testing String Theory from the Sky: Cosmological Probes of Quantum Gravity", to appear in the review section of the International Journal of Modern Physics.

Conference Proceedings (not available from arXiv.org):

1. String Model Construction for the Real World, in *Summer Institute 2006 on Particle Physics and Cosmology*, Asia Pacific Center for Theoretical Physics (APCTP), Postech, Pohang, Korea, August 23 - 29, 2006.
2. Towards Realistic Flux Vacua, in *PASCOS-05, 11th International Symposium on Particles, Strings and Cosmology*, Gyeongju, Korea (2005). AIP Conf. Proc. **805** (2006) 205.
3. Inflation as a probe of trans-Planckian physics: A brief review and progress report, in *11th Mexican School of Particles and Fields*, Xalapa, Veracruz, Mexico (2004), J. Phys. Conf. Ser. **18** (2005) 188.
4. Extracting New Physics from the CMB (with B.R. Greene, K. Schalm, Jan Pieter van der Schaar), astro-ph/0503458, in *Proceedings of the 22nd Texas Symposium on Relativistic Astrophysics*, Stanford University (2004).
5. Probing Strings from the Sky, in *Proceedings of the Second International Conference on String Phenomenology*, Durham University (2003) and *Proceedings of COSPA 2003 Symposium*, Taipei (2003).
6. D-Matter, in *Proceedings of SUSY 2003 Conference*, University of Arizona (2003).
7. Tachyon Dynamics and Brane Cosmology, hep-th/0210313, in *Proceedings of the First International Conference on String Phenomenology*, University of Oxford (2002).
8. Recent Development in M Physics, in *Proceedings of the Third Joint Meeting of Chinese Physicists Worldwide: Role of Physics in the New Millenium: Research, Education and Society*, Hong Kong (2000).
9. Brane World, in *Recent Advances and Cross-Century Outlooks in Physics*, Atlanta, World Scientific (2000).
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