

## Daniel J. H. Chung – Biographical Sketch

### Education and Training

Massachusetts Institute of Technology	Physics Electrical Engineering	B.S. B.S.	1993 1993
University of Chicago	Physics	PhD	1998
University of Michigan	High Energy Theory	Postdoctoral	1998-2001
CERN	High Energy Theory	Postdoctoral	2001-2003

### Research & Professional Experience

2014-present	Professor of Physics	University of Wisconsin – Madison
2009-2014	Associate Professor of Physics	University of Wisconsin – Madison
2003-2009	Assistant Professor of Physics	University of Wisconsin – Madison

**Honors** APS Fellow (2016), DOE Outstanding Junior Investigator Award (2005)

### Selected Publications

1. D. Chung and R. Lu, “Basis Tensor Gauge Theory”, Phys. Rev. D94 (2016) 105016 [arXiv:1609.03679]
2. D. Chung, “Large Blue Isocurvature Spectral Index Signals Time-Dependent Mass,” Phys. Rev. D94 043524 (2016) [arXiv:1509.05850]
3. D. Chung, H. Yoo, and P. Zhou, “Fermionic Isocurvature Perturbations,” Phys. Rev. D91 043516 (2015) [arXiv:1306.1966]
4. D. Chung, A. Long, L-T Wang, “125 GeV Higgs boson and electroweak phase transition model classes,” Phys. Rev. D87 023509 (2013) [arXiv:1209.1819]
5. V. Barger, D. Chung, A. Long, L-T Wang, “Strongly First Order Phase Transitions Near an Enhanced Discrete Symmetry Point,” Phys. Lett. B710 1 (2012) [arXiv:1112.5460]
6. D. Chung, B. Garbrecht, M. Ramsey-Musolf, S. Tulin, “Yukawa Interactions and Supersymmetric Electroweak Baryogenesis,” Phys. Rev. Lett. 102 061301 (2009) [arXiv:0811.3919]
7. N. Afshordi, D. Chung, and G. Geshnizjani, “Cuscuton: A Causal Field Theory with an Infinite Speed of Sound,” Phys. Rev. D75 (2007) [hep-th/0609150]
8. G. Geshnizjani, D. Chung, and N. Afshordi, “Do Large-Scale Inhomogeneities Explain Away Dark Energy?” Phys. Rev. D72 023517 (2005) [astro-ph/0503553]
9. D. Chung, L. Everett, G. Kane, S. King, J. Lykken, L-T Wang, “The Soft Supersymmetry Breaking Lagrangian: Theory and Applications,” Phys. Rept. 407 1 (2005) [hep-ph/0312378]
10. D. Chung, “Classical inflaton field induced creation of superheavy dark matter,” Phys. Rev. D67 (2003) [hep-ph/9809489]
11. D. Chung, E. Kolb, A. Riotto, “Extra dimensions present a new flatness problem”, Phys. Rev. D65 (2002) [hep-ph/0008126]
12. D. Chung, E. Kolb, A. Riotto, I. Tkachev, “Probing Planckian physics: Resonant production of particles during inflation and features in the primordial power spectrum,” Phys. Rev. D62 (2000) [hep-ph/9910437]
13. D. Chung, K. Freese, “Can geodesics in extra dimensions solve the cosmological horizon problem?” Phys. Rev. D62 (2000) [hep-ph/9910235]
14. D. Chung, E. Kolb, A. Riotto, “Nonthermal supermassive dark matter,” Phys. Rev. Lett. 81 (1998) [hep-ph/9805473]
15. D. Chung, E. Kolb, A. Riotto, “Superheavy dark matter,” Phys. Rev. D59 (1999)