#### DAVID ELAZZAR KAPLAN

Department of Physics and Astronomy
Johns Hopkins University
3400 North Charles Street
Baltimore, MD 21218-2686 USA

Phone: (410) 516-7346, Fax: (410) 516-7239 E-mail: dkaplan@pha.jhu.edu May 12, 2011

#### PROFESSIONAL EXPERIENCE:

- **Professor**, Department of Physics and Astronomy, Johns Hopkins University, July 2011 present.
- Associate Professor, Department of Physics and Astronomy, Johns Hopkins University, July 2008 June 2011.
- Assistant Professor, Department of Physics and Astronomy, Johns Hopkins University, September 2002 June 2008.
- Research Associate, Theory Group, Stanford Linear Accelerator Center, Stanford University, September 2001 August 2002.
- Research Associate, High Energy Physics Group, Argonne National Laboratory, and Enrico Fermi Institue, University of Chicago (joint position), October 1999 August 2001.
- Research Assistant, Department of Physics, University of Washington, June 1995 - September 1999.
- Teaching Assistant, Department of Physics, University of Washington, September 1995 - March 1998.
- Visiting Professor, Institute for Theoretical Physics, Stanford University, January June 2007.
- Visiting Professor, Particle Theory Group, Boston University, August December 2002.
- Visiting Scientist:

Oxford University, July 2009.

European Organization for Nuclear Research (CERN), Summer 2007.

Fermilab National Accelerator Laboratory, June 2001.

Harvard University, May 2001.

Lawrence Berkeley National Laboratory, January 2001.

#### **EDUCATION:**

- Ph.D. in Physics, University of Washington, August, 1999.
- M.S. in Physics, University of Washington, August, 1996.
- B.A. in Physics, University of California, Berkeley, May, 1991.

#### FELLOWSHIPS AND AWARDS:

- Fellow, Kavli Foundation, Chair for Frontiers of Science Symposium, 2009.
- Fellow, Alfred P. Sloan Foundation, 2005.
- Outstanding Junior Investigator, Department of Energy, 2003.
- Graduate Student prizes:

Weiss Prize Travel Award, May, 1998.

Karrer Scholarship, May, 1995.

Baumgartner Fellowship, September, 1994 - September, 1995.

#### **TEACHING ACTIVITIES:**

#### **Undergraduate Courses Taught:**

Term	Course Name	Number	Description
Fall 2006	Electromagnetic Theory	171.301	Junior-level, majors
Fall 2007	Electromagnetic Theory	171.301	Junior-level, majors
Fall 2008	Electromagnetic Theory	171.301	Junior-level, majors
Fall 2009	Quantum Mechanics	171.303	Junior-level, majors
Fall 2010	Quantum Mechanics	171.303	Junior-level, majors
Fall 2011	General Physics I for Bio.	171.103	Gateway course
Fall 2012	General Physics I for Bio.	171.103	Gateway course

### Graduate Courses Taught:

Term	Course Name	Number	Description
Spring 2003	Advanced Particle Theory	171.753	Beyond the Standard Model.
Fall 2003	Theoretical Mechanics	171.601	First Year Graduate
Spring 2004	Advanced Particle Theory	171.753	Group Theory
Fall 2004	Theoretical Mechanics	171.601	First Year Graduate
Spring 2005	Advanced Particle Theory	171.753	The Early Universe
Fall 2005	Theoretical Mechanics	171.601	First Year Graduate
Spring 2010	Advanced Particle Theory	171.753	Renormalization Group
Spring 2011	Advanced Particle Theory	171.784	Supersymmetry
Spring 2012	Advanced Particle Theory	171.784	The Higgs and Beyond

Serves as **First-Year Graduate Advisor**; runs the Graduate Seminar course, 172.632 (2009-2012).

#### STUDENTS ADVISED:

#### Graduate Thesis Advisees:

- Puneet Batra, Stanford University, Ph.D., 2004 (co-advised with S. Dimopoulos), Chief Data Scientist at Kyruus, Boston, MA.
- Andrew Blechman, Johns Hopkins University, Ph.D., 2006, physics teacher, The Roeper School, Bloomfield Hills, MI.
- Linda Carpenter, JHU, Ph.D., 2006, assistant professor, Department of Physics, Ohio State University.
- E.J. Rhee, JHU (graduate student), deceased.
- Matthew McEvoy, JHU, Ph.D., 2010, Risk Group at Goldman-Sachs.
- Keith Rehermann, JHU, Ph.D., 2010, postdoc at MIT.
- Gordan Krnjaic, JHU, Ph.D., 2012, postdoc at the Perimeter Institute, Waterloo, Ont, Canada.
- Tom Zorawski, Arpit Gupta, Matthew Walters (JHU current).

#### Undergraduate Research:

- Birju Patel, "LHC test-data analysis," 2005 (now at Johns Hopkins School of Medicine).
- Clare Bernard, "Higgs to b b + mu mu," 2008 (now at Boston University, Physics Department).

#### POSTDOCTORAL FELLOWS MENTORED:

- Antonio Delgado, 2002-2004, Assistant Professor, University of Notre Dame
- Frank Petriello, 2003-2005, Associate Professor, Northwestern University
- Roberto Contino, 2003-2006, Researcher, University of Rome La Sapienza
- Matthew Schwartz, 2005-2008, Assistant Professor, Harvard University
- Brock Tweedie, 2007-2010, postdoc, Boston University
- Matthew Baumgart, 2009-2012, postdoc, Carnegie Mellen University
- Surject Rajendran, 2010-2011, postdoc, Stanford University
- Daniel Stolarski, 2010-present
- Reinard Primalundo, 2012-present

#### **GRANTS AWARDED:**

- National Science Foundation, co-PI, "Particle Physics and Cosmology: Theory Meets Data," \$1.80M, 2012 (3 yrs).
- National Science Foundation, co-PI, "Particle Theory in the LHC Era," Supplement, \$160,700, 2012.
- National Science Foundation, co-PI, "Particle Theory in the LHC Era," \$1.35M, 2009 (3 yrs).
- National Science Foundation, co-PI, "Theories of Matter, Energy, Space and Time," \$1.825M, 2004 (5 yrs).
- Sloan Foundation, Fellow, \$45K, 2005 (2 yrs).
- Department of Energy, Outstanding Junior Investigator, \$197K, 2003 (4 yrs).
- National Science Foundation, PI, "Uncovering the Physics Above the Electroweak Scale," \$50K, 2003 (2 yrs).

#### PROFESSIONAL SERVICE:

- Co-organizer of "New Collisions Between Theory and Experiment," 34th Johns Hopkins Workshop on Current Problems in Particle Theory, Baltimore, MD, May, 2010.
- Co-organizer of "New Physics at the Electroweak Scale and New Signals at Hadron Colliders," Aspen Center for Physics, January, 2007.
- Co-organizer of "Superspace, Hyperspace, Theory Space and Outer Space," 28th Johns Hopkins Workshop on Current Problems in Particle Theory, Baltimore, MD, June, 2004.

- Co-organizer of "New Physics at the Weak Scale and Beyond," Aspen Center for Physics, June July, 2003.
- Co-convener of subgroup in "Scales Beyond 1 TeV" Working Group, Snowmass, CO, June July, 2001.
- Co-organizer of the Argonne Theory Institute 2001: "From Supersymmetry to Extra Dimensions," June, 2001.
- Co-organizer of the Argonne Theory Institute 2000: "Supersymmetry and Higgs Physics from Theory to Experiment," May, 2000.

#### **OUTREACH ACTIVITIES:**

- Creator and Producer, *Particle Fever*, two-hour documentary about particle physics during the era of the Large Hadron Collider, estimated release, Summer, 2013.
- Host, The Known Universe, National Geographic Channel, beginning Spring, 2011.
- Public Lecture, sponsored by LHCPhenoNet, Valencia, Spain, February, 2011.
- Public Lecture, sponsored by the Aspen Center for Physics, Aspen, CO, "The Large Hadron Collider: Living with the Uncertainty Principle," January, 2010.
- Author, "Fundamental Interactions," Foundations of Physics online textbook, sponsored by the Annenberg Foundation, 2010.
- Science Advisor and Host, *The Next Big Bang*, one-hour program on the History Channel about the LHC, aired in U.S. and Europe, Summer and Fall, 2008.

### TALKS AND SUMMER/WINTER SCHOOLS:

#### **Invited Conference Talks:**

- "Origin of Mass 2012," invited conference talk, Stockholm, Sweden, June 2012.
- "SavasFest 2012," invited festschrift talk, Stanford University, May 2012.
- "Heavy Particles at the LHC," invited conference talk, ETH Zurich, Switzerland, January 2011.
- "The Terascale at the LHC 0.5 and Tevatron," invited conference talk, Seattle, WA, June 2010.
- Kavli Symposium, talk and session chair on Dark Matter, Irvine, CA, November 2009.
- LHCb Collaboration Meeting, lecture, Florence, Italy, "Discovering the Higgs and Su-

persymmetry at LHBb," September 2009.

- USCMS Workshop, Fermi National Accelerator Laboratory, opening talk, "Early Physics at the LHC," August 2009.
- "Long-Lived Particle Searches at the LHC," invited conference talk, Seattle, WA, May 2009.
- CIAR Cosmology and Gravity Meeting, Whistler, Canada, talk, "The Higgs and Supersymmetry at the LHC," May 2007.
- SUSY06, Conference on Supersymmetry and Unification, Durham, UK, "The Higgs was at LEP and we missed it A Case For Baryon Number Violation," June 2006
- "LHC Olympics," CERN, Geneva, Switzerland, presentation of results, Feb 2006
- SUSY05, Conference on Supersymmetry and Unification, Durham, UK, talk, "A Symmetry for the Cosmological Constant," June 2005
- PHENO Symposium, Madison, WI, plenary speaker, "New Approaches to Electroweak Symmetry Breaking," May 2005.
- Yukawa Institute of Theoretical Physics, Workshop on Particle Physics, Kyoto, Japan, talk, "The Little Higgs from a Simple Group," June 2005.
- Argonne Theory Institute, Argonne National Laboratory, talk, "Higgs Mass Bound in Gauge Extensions of the Standard Model," May 2005
- American Physical Society Meeting, talk, "Higgs Mass Bounds in Gauge Extensions of the Standard Model," 2005
- Weak Scale Workshop, Technion, Haifa, Israel, "Perturbative UV Completions of the Little Higgs," March 2005
- Frontiers of Physics Beyond the Standard Model II, talk, "Higgs Mass Bounds in Gauge Extensions of the Standard Model," University of Minnesota, October 2004.
- New Directions in Physics beyond the Standard Model, Scuola Normale Superiore, Pisa, Italy, seminar "Weakly Coupled UV Completions to the Little Higgs," June 2004.
- Frontiers of Physics Beyond the Standard Model, University of Minnesota, talk, "The Weak Mixing Angle from an SU(3) Symmetry at a TeV," October 2002.
- SUSY02, Conference on Supersymmetry and Unification, DESY, Hamburg, Germany, talk, "The Weak Mixing Angle from an SU(3) Symmetry at a TeV," June 2002.
- Summer Institute 2001, Nikkeiren Fuji training center, Fuji-yoshida, Yamanashi, Japan, lectures, "Supersymmetry Breaking in Extra Dimensions," August 2001.
- PHENO 2001 Symposium, Madison, Wisconsin, talk, "Supersymmetry Breaking,

Fermion Masses, and a Small Extra Dimension," May 2001.

- XXXVI Rencontres de Moriond Electroweak Interactions and Unified Theories, Les Arcs, France, talk, "Supersymmetry Breaking Through Extra Dimensions," March 2001.
- Beyond 4d Conference, International Center for Theoretical Physics, Trieste, Italy, talk, "Gaugino-Mediated Supersymmetry Breaking," July 2000.
- SUSY2K, Conference on Supersymmetry and Unification, CERN, Geneva, Switzerland, talk, "Gaugino-Mediated Supersymmetry Breaking," June 2000.
- PHENO 2000 Symposium, Madison, Wisconsin, "Gaugino-Mediated Supersymmetry Breaking," April 2000.
- SUSY98: Conference on Supersymmetry and Unification, talk, "Mediating Flavor and Supersymmetry Breaking with the Same U(1)," Oxford, UK, July 1998.

#### Summer/Winter School and Named Lectures:

- Theoretical Advanced Study Institute, summer school lecturer, Boulder, CO, June 2008.
- Hadron Collider Physics Summer School, CERN, Geneva, Switzerland, lectures, "Physics Beyond the Standard Model," June 2007.
- CERN Academic Lectures, Geneva, Switzerland, "Supersymmetry," Feb 2007.
- Lake Louise Winter Institute, lectures, "Physics Beyond the Standard Model," Feb 2006.

#### Colloquia, Invited Workshops, and Seminars:

- LHC Top Working Group, seminar, CERN, Geneva, Switzerland, July 2012.
- Stanford University, seminar, Jan 2012.
- Kavli Institute for Theoretical Physics, workshop participant, Santa Barbara, CA, June-July 2011.
- Aspen Center for Physics, Aspen, CO, workshop participant, June-July 2010.
- CERN, Geneva, Switzerland, seminar, "Discovering the Higgs and Supersymmetry at LHCb," July 2007.
- University of Oregon, seminar, "Baryon-Number Violating Decays of the Higgs," May 2007.
- UC Davis, seminar, "Baryon-Number Violating Decays of the Higgs," April 2007.

- Stanford University, seminar, "Discovering the Higgs and Supersymmetry at LHCb," March 2007.
- New York University, seminar, "Higgs and Supersymmetry at LHCb," Nov 2006.
- Stanford University, seminar, "Reduced Fine-Tuning of Supersymmetry with R-parity Violation," October 2006.
- Aspen Center for Physics, Aspen, CO, workshop participant, August-September 2006
- LHCb group meeting, CERN, "Higgs to 4bs at LHCb," August 2006.
- Syracuse University, colloquium, "Scalar Fields and Symmetry Breaking in Particle Physics and Cosmology," April 2006.
- Michigan State University, seminar, "Supersymmetry with Heavy Higgses," March 2006.
- University of Wisconsin, Madison, colloquium, "Collective Symmetry Breaking in Particle Physics and Cosmology," November 2005.
- University of Arizona, colloquium, "Collective Symmetry Breaking in Particle Physics and Cosmology," October 2005.
- Aspen Center for Physics, Aspen, CO, workshop participant, August-September 2005
- Joint Theory Seminar for the Boston area (BU-Harvard-MIT), Boston University, "A Little Higgs Tower," April 2005
- Aspen Center for Physics, Aspen, CO, Winter Conference, talk, "Little Higgs Theories," Jan 2005.
- Aspen Center for Physics, Aspen, CO, workshop participant, July 2004
- Joint Theory Seminar for the Boston area (BU-Harvard-MIT), Harvard University, "The Little Higgs from a Simple Group," April 2003.
- Harvard University, seminar, "The Weak Mixing Angle from an SU(3) Symmetry at a TeV," October 2002.
- Aspen Center for Physics, colloquium, "Symmetries in and Beyond the Standard Model of Particle Physics," July 2002.
- $\bullet$  University of Maryland, seminar, "The Weak Mixing Angle from an SU(3) Symmetry at a TeV," March 2002.
- University of Hawaii, colloquium, "Symmetries in and Beyond the Standard Model of Particle Physics," March 2002.
- University of Washington, seminar, "The Weak Mixing Angle from an SU(3) Symmetry at a TeV," March 2002.

- $\bullet$  Johns Hopkins University, seminar, "SU(3) Electroweak Unification at 1 TeV," February 2002.
- MIT, seminar, "SU(3) Electroweak Unification at 1 TeV," February 2002.
- Stanford Linear Accelerator Center, seminar, "Radion Mediation as Scherk-Swartz Supersymmetry Breaking," Oct 2001.
- Aspen Center for Physics, Aspen, CO, workshop participant, July August 2001.
- University of Washington, seminar, "Supersymmetry Breaking, Fermion Masses, and a Small Extra Dimension," May 2001.
- Fermi National Accelerator Laboratory, seminar, "Supersymmetry Breaking, Fermion Masses, and a Small Extra Dimension," April 2001.
- Columbia University, seminar, "Supersymmetry Breaking, Fermion Masses, and a Small Extra Dimension," March 2001.
- Brookhaven National Lab, seminar, "Gaugino-Assisted Anomaly Mediation," March 2001.
- Johns Hopkins University, seminar, "Supersymmetry Breaking, Fermion Masses, and a Small Extra Dimension," March 2001.
- University of Washington, seminar, "Gaugino-Assisted Anomaly Mediation," Jan 2001.
- University of Chicago, seminar, "Gaugino-Assisted Anomaly Mediation," Dec 2000.
- UC Berkeley, seminar, "Gaugino-Assisted Anomaly Mediation," Nov 2000.
- Stanford Linear Accelerator Center, seminar, "Gaugino-Assisted Anomaly Mediation," Nov 2000.
- Weizmann Institute, Rehovot, Israel, "Gaugino-Assisted Anomaly Mediation," Oct 2000.
- Fermi National Accelerator Laboratory, seminar "Gaugino-Mediated Supersymmetry Breaking," July 2000.
- Aspen Center for Physics, Aspen, CO, workshop participant, August September 2000.
- University of Chicago, seminar, "Supersymmetry Breaking Through Transparent Extra Dimensions," February 2000.
- Michigan State University, seminar, "Supersymmetry Breaking Through Transparent Extra Dimensions," November 1999.
- RAL-Oxford University, UK, seminar, "Flavor-Mediated Supersymmetry Breaking," February 1999.

- University of Sussex, UK, seminar, "Flavor-Mediated Supersymmetry Breaking," February 1999.
- Weizmann Institute, Rehovot, Israel, seminar, "Flavor-Mediated Supersymmetry Breaking," January 1999.
- International Center for Theoretical Physics, Trieste, Italy, seminar, "Flavor-Mediated Supersymmetry Breaking," January 1999.
- International Center for Theoretical Physics, Trieste, Italy, lunchtime talk, "Neutrino Masses from Bilinear R-parity Violation, January 1999.
- Purdue University, seminar, "Breaking Flavor and Supersymmetry with the Same U(1)," November 1998.
- University of Chicago, seminar, "Breaking Flavor and Supersymmetry with the Same U(1)," November 1998.
- UC Berkeley, seminar, "Breaking Flavor and Supersymmetry with the Same U(1)," October 1998.
- Stanford Linear Accelerator Center, seminar, "Breaking Flavor and Supersymmetry with the Same U(1)," October 1998.
- University of Wisconsin, Madison, seminar, "Breaking Flavor and Supersymmetry with the Same U(1)," October 1998.

#### PUBLICATIONS AND SUBMITTED ARTICLES:

1. "Searching for Direct Stop Production in Hadronic Top Data at the LHC"

```
D. E. Kaplan, K. Rehermann and D. Stolarski,JHEP 1207, 119 (2012)[arXiv:1205.5816 [hep-ph]].
```

2. "Displaced Supersymmetry"

```
P. W. Graham, D. E. Kaplan, S. Rajendran and P. Saraswat,JHEP 1207, 149 (2012)[arXiv:1204.6038 [hep-ph]].
```

3. "Semiconductor Probes of Light Dark Matter"

P. W. Graham, D. E. Kaplan, S. Rajendran and M. T. Walters,

Phys. Dark Univ. 1, 32 (2012)

[arXiv:1203.2531 [hep-ph]].

#### 4. "Dark Atoms: Asymmetry and Direct Detection"

D. E. Kaplan, G. Z. Krnjaic, K. R. Rehermann and C. M. Wells,

JCAP **1110**, 011 (2011)

[arXiv:1105.2073 [hep-ph]].

### 5. "Associated production of non-standard Higgs bosons at the LHC"

D. E. Kaplan and M. McEvoy,

Phys. Rev. **D**, in press.

[arXiv:1102.0704 [hep-ph]].

# 6. "Leptonic indirect detection signals from strongly interacting asymmetric dark matter"

Y. Cai, M. A. Luty, D. E. Kaplan,

Journal of Cosmology and Astroparticle Physics, under review.

[arXiv:0909.5499 [hep-ph]].

#### 7. "Searching for Higgs decays to four bottom quarks at LHCb"

D. E. Kaplan, M. McEvoy, Phys. Lett. **B**, in press.

[arXiv:0909.1521 [hep-ph]].

#### 8. "Atomic dark matter"

D. E. Kaplan, G. Z. Krnjaic, K. R. Rehermann et al.,

Journal of Cosmology and Astroparticle Physics 1005, 021 (2010).

[arXiv:0909.0753 [hep-ph]].

#### 9. "Asymmetric dark matter"

D. E. Kaplan, M. A. Luty, K. M. Zurek,

Phys. Rev. **D79**, 115016 (2009).

[arXiv:0901.4117 [hep-ph]].

# 10. "Top tagging: A method for identifying boosted hadronically decaying top quarks"

D. E. Kaplan, K. Rehermann, M. D. Schwartz et al.,

Phys. Rev. Lett. **101**, 142001 (2008).

[arXiv:0806.0848 [hep-ph]].

#### 11. "Constraining light colored particles with event shapes"

D. E. Kaplan, M. D. Schwartz,

Phys. Rev. Lett. 101, 022002 (2008).

[arXiv:0804.2477 [hep-ph]].

# 12. "New light windows for sparticle masses and Higgs decays in the R parity violating MSSM"

L. M. Carpenter, D. E. Kaplan, E. J. Rhee,

[arXiv:0804.1581 [hep-ph]].

# 13. "Proposal for Higgs and superpartner searches at the LHCb experiment"

D. E. Kaplan and K. Rehermann

Journal of High Energy Physics **0710**, 056 (2007)

[arXiv:0705.3426 [hep-ph]].

#### 14. "Reduced fine-tuning in supersymmetry with R-parity violation"

L. M. Carpenter, D. E. Kaplan and E. J. Rhee

Phys. Rev. Lett. 99, 211801 (2007)

[arXiv:hep-ph/0607204].

#### 15. "A symmetry for the cosmological constant"

D. E. Kaplan and R. Sundrum

Journal of High Energy Physics **0607**, 042 (2006)

[arXiv:hep-th/0505265].

#### 16. "The NMSSM, anomaly mediation and a Dirac Bino"

L. M. Carpenter, P. J. Fox and D. E. Kaplan

arXiv:hep-ph/0503093.

### 17. "Perturbative, non-supersymmetric completions of the little Higgs"

P. Batra and D. E. Kaplan

Journal of High Energy Physics **0503**, 028 (2005)

[arXiv:hep-ph/0412267].

#### 18. "Little Higgses and turtles"

D. E. Kaplan, M. Schmaltz and W. Skiba

Phys. Rev. D **70**, 075009 (2004) [arXiv:hep-ph/0405257].

#### 19. "Running into new territory in SUSY parameter space"

P. Batra, A. Delgado, D. E. Kaplan and T. M. P. Tait Journal of High Energy Physics **0406**, 032 (2004) [arXiv:hep-ph/0404251].

# 20. "The Higgs mass bound in gauge extensions of the minimal supersymmetric standard model"

P. Batra, A. Delgado, D. E. Kaplan and T. M. P. Tait Journal of High Energy Physics **0402**, 043 (2004) [arXiv:hep-ph/0309149].

### 21. "The little Higgs from a simple group"

D. E. Kaplan and M. Schmaltz Journal of High Energy Physics **0310**, 039 (2003) [arXiv:hep-ph/0302049].

### 22. "Little inflatons and gauge inflation"

D. E. Kaplan and N. J. Weiner Journal of Cosmology and Astroparticle Physics **0402**, 005 (2004) [arXiv:hep-ph/0302014].

### 23. "A half-composite standard model at a TeV and $\sin^2 \theta_W$ "

S. Dimopoulos and D. E. Kaplan arXiv:hep-ph/0203001.

### 24. "Electroweak unification into a five-dimensional SU(3) at a TeV"

S. Dimopoulos, D. E. Kaplan and N. Weiner Phys. Lett. B **534**, 124 (2002)[arXiv:hep-ph/0202136].

### 25. "The weak mixing angle from an SU(3) symmetry at a TeV"

S. Dimopoulos and D. E. Kaplan Phys. Lett. B **531**, 127 (2002) [arXiv:hep-ph/0201148].

#### 26. "New tools for fermion masses from extra dimensions"

D. E. Kaplan and T. M. P. Tait Journal of High Energy Physics **0111**, 051 (2001) [arXiv:hep-ph/0110126].

# 27. "Radion mediated supersymmetry breaking as a Scherk-Schwarz theory"

D. E. Kaplan and N. Weiner arXiv:hep-ph/0108001.

#### 28. "Deconstructing gaugino mediation"

H. C. Cheng, D. E. Kaplan, M. Schmaltz and W. SkibaPhys. Lett. B 515, 395 (2001)[arXiv:hep-ph/0106098].

### 29. "Axions and a gauged Peccei-Quinn symmetry"

H. C. Cheng and D. E. Kaplan arXiv:hep-ph/0103346.

### 30. "Viable ultraviolet-insensitive supersymmetry breaking"

N. Arkani-Hamed, D. E. Kaplan, H. Murayama and Y. Nomura Journal of High Energy Physics **0102**, 041 (2001) [arXiv:hep-ph/0012103].

# 31. "Low energy supersymmetry and the Tevatron bottom-quark cross section"

E. L. Berger, B. W. Harris, D. E. Kaplan, Z. Sullivan, T. M. P. Tait and C. E. M. Wagner

Phys. Rev. Lett. **86**, 4231 (2001) [arXiv:hep-ph/0012001].

### 32. "Gaugino-assisted anomaly mediation"

D. E. Kaplan and G. D. Kribs Journal of High Energy Physics **0009**, 048 (2000) [arXiv:hep-ph/0009195].

# 33. "Supersymmetry breaking, fermion masses and a small extra dimension"

D. E. Kaplan and T. M. P. Tait

Journal of High Energy Physics **0006**, 020 (2000) [arXiv:hep-ph/0004200].

#### 34. "Supersymmetry breaking through transparent extra dimensions"

D. E. Kaplan, G. D. Kribs and M. Schmaltz

Phys. Rev. D 62, 035010 (2000)

[arXiv:hep-ph/9911293].

### 35. "Phenomenology of flavor-mediated supersymmetry breaking"

D. E. Kaplan and G. D. Kribs

Phys. Rev. D 61, 075011 (2000)

[arXiv:hep-ph/9906341].

## 36. "Solar and atmospheric neutrino oscillations from bilinear R-parity violation"

D. E. Kaplan and A. E. Nelson

Journal of High Energy Physics **0001**, 033 (2000)

[arXiv:hep-ph/9901254].

# 37. "Fermion masses and gauge mediated supersymmetry breaking from a single U(1)"

D. E. Kaplan, F. Lepeintre, A. Masiero, A. E. Nelson and A. Riotto

Phys. Rev. D **60**, 055003 (1999)

[arXiv:hep-ph/9806430].

#### 38. "Violating R-parity at the B-factory"

D. E. Kaplan

arXiv:hep-ph/9703347.