

MARC KAMIONKOWSKI

Current Position:

William R. Kenan, Jr. Professor of Physics and Astronomy, Johns Hopkins University

Office:

Johns Hopkins University
Department of Physics and Astronomy
Bloomberg 439
3400 N. Charles Street
Baltimore, MD 21218
phone: (410) 516-0373
fax: (410) 516-7239
kamion@jhu.edu
<http://www.pha.jhu.edu/~kamion>

Education:

Ph.D. (Physics), University of Chicago, December 1991

B.A. (Physics, *summa cum laude*), Washington University in St. Louis, June 1987

Professional History:

William R. Kenan, Jr. Professor of Physics and Astronomy, Johns Hopkins University, 2016–

Professor of Physics and Astronomy, Johns Hopkins University, 2011–2015

Robinson Professor of Theoretical Physics and Astrophysics, California Institute of Technology, 2006–2012

Miller Visiting Research Professor, Department of Physics, University of California, Berkeley, Fall 2010

Founding Director, Moore Center for Theoretical Cosmology and Physics, Caltech, 2006–2011

Professor of Theoretical Physics and Astrophysics, California Institute of Technology, 1999–2006

Associate Professor, Department of Physics, Columbia University, 1998–1999

Assistant Professor, Department of Physics, Columbia University, 1994–1998

Long-Term Member, Institute for Advanced Study, 1994

Member, Institute for Advanced Study, 1991–1994

Awards and Honors:

Fellow, International Society of General Relativity and Gravitation, 2016
Dannie Heineman Prize for Astrophysics, AAS/AIP, 2015
Distinguished Fellow, Kosciuszko Foundation Collegium of Eminent Scientists, 2014
Simons Foundation Investigator, 2014–2019
Rosenblum Lecturer, Hebrew University, March 2014
Member, American Academy of Arts and Sciences, 2013
Shaker Heights High School Hall of Fame, Elected 2013
Fellow, American Physical Society, 2008
DoE Ernest O. Lawrence Award (High Energy and Nuclear Physics), 2006
DoE Outstanding Junior Investigator, 1998–1999
Helen B. Warner Prize, American Astronomical Society, 1998
Alfred P. Sloan Foundation Fellow, 1996–1998
SSC National Fellow, 1991–1993
NASA GSRP Fellow, July 1989–Sept 1991
Phi Beta Kappa, May 1986
National Merit Scholar, 1983–1987

Professional Societies:

American Academy of Arts and Sciences
Astronomical Society of the Pacific
American Association for the Advancement of Science
American Physical Society
American Astronomical Society
International Society of General Relativity and Gravitation

Professional Service:

Editor in Chief, *Physics Reports*, 2008–present
Astrophysics and Cosmology Editor, *Physics Reports*, 1998–present
NSF/DoE Nuclear Science Advisory Committee Subcommittee on Neutrino-less Double Beta Decay, 2015–
Member-at-Large, Division of Astrophysics Executive Committee of the American Physical Society, 2015–2017
Trustee, Aspen Center for Physics, 2010–2016
DoE HEP INSPIRE Review Panel, 2015
Member, NSF MPS AC Subcommittee on NSF Response to the P5 Strategic Plan, 2014–2015
Member, Nominations Committee for arXiv Scientific Advisory Board, 2014

Member, Advisory Board, The Buchalter Cosmology Prize, 2014–

Advisor, Simons Foundation Physics Programs, 2011–2012

Member, Nominating Committee, Division of Astrophysics, American Physical Society, 2009

Member, Particle Astrophysics Scientific Assessment Group (PASAG), 2009

Member, Cosmology and Fundamental Physics Panel of Astro2010 (Astronomy and Astrophysics Decadal Survey), 2009–2010

Co-organizer, “New Horizons for Modern Cosmology,” a workshop at the Galileo Galilei Institute for Theoretical Physics, Florence, January–March 2009

Co-organizer, “Understanding the Dark Sector: Dark Matter and Dark Energy,” Aspen Winter Workshop, January 2009

Co-organizer, Aspen Winter Workshop on the CMB, January 2008

Fermilab Research Alliance Visiting Committee, 2008–2011

Member, Advisory Board, *Journal of Cosmology and Astroparticle Physics*, 2005–

Scientific Secretary (2009) and Assistant Scientific Secretary (20008), Aspen Center for Physics

Member, Aspen Center for Physics, 2004–2013

Annual Program Review Committee, Fermilab, 2007

Receiving Editor, *Journal of Cosmology and Astroparticle Physics*, 2002–2005

Receiving Editor, *Journal of High Energy Physics*, 1997–2003

External Advisory Committee, Physics Division, Lawrence Berkeley Laboratory, 2004–2005

Member, Dark Energy Task Force, 2005–2006

External Advisory Committee, VERITAS, 2003–2004

Advisory Committee, NSF Center for Cosmological Physics (University of Chicago), 2002–2004.

Particle Physics Project Prioritization Panel (P5), 2002–2004.

Co-organizer, 15th Annual Beckman U.S. Frontiers of Science Symposium, November 2003, Irvine, CA

Co-convenor, Working Group P4 on Astro/Cosmo/Particle Physics for the workshop, Snowmass 2001: The Future of Particle Physics

Referee for the reports of the Committee on Physics of the Universe, 2000, 2002

Theory and Computation Panel, NAS Astronomy and Astrophysics Survey Committee, 1998–2000

Internal Referee for the report of the Astronomy and Astrophysics Survey Committee, 1999–2000

NASA/NSF/DoE Cosmic Genesis and Fundamental Physics Working Group, 1999–2000

NASA Structure and Evolution of the Universe Subcommittee, 1998–2002

NASA Science Working Group and Facilities Science Team for the Gamma Ray Large Area Space Telescope, 1996–1999

NASA Ad Hoc Committee on Future Cosmic Microwave Background Missions 1998–1999

Co-organizers, “Theoretical Astrophysics in Southern California (TASC),” a workshop held at Caltech, October 26, 2001

Coordinator, “The New Cosmology Confronts Observation: The Cosmic Microwave Background, Dark Matter, Dark Energy, and Brane Worlds,” an ITP (Santa Barbara) workshop held August–December 2002

Coordinator, “Probing the Universe with the Cosmic Microwave Background,” an ITP (Santa Barbara) mini-workshop, July 2000.

Co-organizer, Aspen workshop on “The Dark Side of the Universe,” Aspen, CO, June 2000.

Co-organizer, “Energy Densities in the Universe,” Les Arcs, France, January 2000.

Super-convener for “Origin of the Universe” session of the Workshop on Cosmic Genesis and Fundamental Physics, Sonoma State University, October 28–30, 1999.

Ph.D. Students Supervised:

Current Students:

Patrick Breysse (Ph.D. 2016)

Julian Munoz (Ph.D. 2017)

Tanvi Karwal (Ph.D. 2018)

Daniel Pfeffer (Ph.D. 2018)

Past Students:

Liang Dai Ph.D. 2015 (to Einstein Fellowship at IAS, Fall 2015)

Vera Gluscevic, Ph.D. 2013 (Postdoc, IAS)

Samuel Lee, Ph.D. 2012 (Postdoc, Princeton University)

Laura Book, Ph.D. 2012 (Junior Developer, Malachi Arts, Los Angeles)

Anthony Pullen, Ph.D. 2011 (Postdoc, Carnegie-Mellon University)

Daniel Grin, Ph.D. 2010 (Postdoc, U. of Chicago)

Adrienne Erickcek, Ph.D. 2009 (assistant professor, U. of North Carolina)

Tristan L. Smith, Ph.D. 2008 (assistant professor, Swarthmore College)

Jonathan Pritchard, Ph.D. 2007 (lecturer, Imperial College)

Kris R. Sigurdson, Ph.D. 2005 (associate professor, University of British Columbia)

Nevin N. Weinberg, Ph.D. 2005 (assistant professor, MIT)

Michael H. Kesden, Ph.D. 2005 (assistant professor, UT Dallas)

Michael R. Santos, Ph.D. 2004 (Deputy Director, Bill and Melinda Gates Foundation)

Alexandre Refregier, Ph.D. 1997 (Professor, Zurich)

Catherine Cress, Ph.D. 1998 (Professor, University of the Western Cape, South Africa)

Xuele Chen, Ph.D 1999 (Professor, National Astronomical Observatories, China)
Ari Buchalter, Ph.D. 1999 (CoO, MediaMath)

Postdoctoral Scientists Advised:

Current Postdocs:

Ely Kovetz 2014–
Alvise Raccanelli, 2014–
Yacine Ali-Haimoud, 2014–
Simeon Bird, 2015–
Ilias Cholis, 2015–

Past Postdocs:

Jennifer Siegal-Gaskins, 2011–2014 (GRAPPA, Amsterdam)
Jens Chluba, 2012–2014 (Royal Society Fellow, Cambridge)
Donghui Jeong, 2010–2014 (assistant professor, Penn State)
Josef Pradler, 2012–2014 (assistant professor, Vienna)
Matthew Kistler, 2010–2011 (postdoc, Stanford)
Fabian Schmidt, 2009–2012 (jr faculty, Max Planck Institute Garching)
Shin'ichiro Ando, 2006–2011 (assistant professor, U. of Amsterdam)
Daniel Babich, 2006–2008 (Fortelus Capital Management)
Annika Peter, 2007–2010 (assistant professor, Ohio State U.)
Daisuke Nagai, 2005–2008 (associate professor, Yale University)
Stefano Profumo, 2005–2007 (associate professor, University of California, Santa Cruz)
Nicole Bell, 2004–2006 (senior lecturer, University of Melbourne)
Elena Pierpaoli, 2004–2006 (professor, University of Southern California)
Steven Furlanetto 2003–2006 (associate professor, UCLA)
Eric Agol, 2000–2003 (associate professor, University of Washington)
Andriy Kurylov, 2002–2004 (JP Morgan Chase)
Lara Arielle Phillips, 2002–2005 (research assistant professor, Notre Dame University)
Milos Milosavljevic, 2002–2006 (associate professor, University of Texas, Austin)
Asantha Cooray, 2001–2004 (professor, UC Irvine)
Andrew Benson, 2000–2003 (Scientist, Carnegie Observatories)
Paolo Catelan, 2000–2001
Siang-Peng Oh, 2000–2003 (associate professor, UC Santa Barbara)
Kenneth Nollett, 2000–2002 (physicist, Argonne National Laboratory)
Limin Wang, 1998–2000 (SMG Quantitative)
Piero Ullio, 1999–2000 (professor, SISSA, Trieste)
Frank J. Summers, July 1996–March 1998 (scientist, Space Telescope Science Institute)

Publications:

Refereed Journal Articles:

1. “Cosmic-Ray Energy Spectra between 10 and Several Hundred GeV per Atomic Mass Unit for Elements from ^{18}Ar to ^{28}Ni : Results from *HEAO 3*,” W. R. Binns, T. L. Garrard, M. H. Israel, M. D. Jones, M. P. Kamionkowski, J. Klarmann, E. C. Stone, and C. J. Waddington, *Astrophysical Journal* **324**, 1106–1117 (1988).
2. “Searching for *CP* Violation in ‘Charge-Blind’ Jets,” Marc Kamionkowski, *Physical Review D* **41**, 1672–1674 (1990).
3. “Unitarity Limits on the Mass and Radius of Dark Matter Particles,” Kim Griest and Marc Kamionkowski, *Physical Review Letters* **64**, 615–618 (1990).
4. “Supersymmetric Dark Matter Above the *W* Mass,” Kim Griest, Marc Kamionkowski, and Michael S. Turner, *Physical Review D* **41**, 3565–3582 (1990).
5. “Thermal Relics: Do We Know Their Abundances?” Marc Kamionkowski and Michael S. Turner, *Physical Review D* **42**, 3310–3320 (1990).
6. “Distinctive Cosmic-Ray Positron Signatures of Heavy Dark Matter,” Marc Kamionkowski and Michael S. Turner, *Physical Review D* **43**, 1774–1780 (1991).
7. “Energetic Neutrinos from Heavy-Neutralino Annihilation in the Sun,” Marc Kamionkowski, *Physical Review D* **44**, 3021–3042 (1991).
8. “Signatures of Dark Matter in Underground Detectors,” Francis Halzen, Tim Stelzer, and Marc Kamionkowski, *Physical Review D* **45**, 4439–4442 (1992).
9. “Are Textures Natural?” Marc Kamionkowski and John March-Russell, *Physical Review Letters* **69**, 1485–1488 (1992) [arXiv:hep-th/9201063].
10. “Planck-Scale Physics and the Peccei-Quinn Mechanism,” Marc Kamionkowski and John March-Russell, *Physics Letters B* **282**, 137–141 (1992) [arXiv:hep-th/9202003].
11. “Instability and Subsequent Evolution of Electroweak Bubbles,” Marc Kamionkowski and Katherine Freese, *Physical Review Letters* **69**, 2743–2746 (1992) [arXiv:hep-ph/9208202].
12. “The Rate of the Proton-Proton Reaction,” Marc Kamionkowski and John N. Bahcall, *Astrophysical Journal* **420**, 884–891 (1994) [arXiv:astro-ph/9305020].
13. “Vacuum-Polarization Corrections to Nuclear Reaction Rates,” Marc Kamionkowski and John N. Bahcall, *Physical Review C* **49**, 545–547 (1994) [arXiv:astro-ph/9306024].
14. “Neutralino Annihilation into Gluons,” Manuel M. Drees, Gerard Jungman, Marc Kamionkowski, and Mihoko M. Nojiri, *Physical Review D* **49**, 636–647 (1994) [arXiv:hep-ph/9306325].
15. “Gravitational Radiation from First-Order Phase Transitions,” Marc Kamionkowski, Arthur Kosowsky, and Michael S. Turner, *Physical Review D* **49**, 2837–2851 (1994) [arXiv:astro-ph/9310044].
16. “Cosmic-Ray Antiprotons from Neutralino Annihilation into Gluons,” Gerard Jungman and Marc Kamionkowski, *Physical Review D* **49**, 2316–2321 (1994) [arXiv:astro-ph/9310032].
17. “Large-Angle Cosmic Microwave Anisotropies in an Open Universe,” Marc Kamionkowski and David N. Spergel, *Astrophysical Journal* **432**, 7–16 (1994) [arXiv:astro-ph/9312017].

18. “Small-Scale Cosmic Microwave Background Anisotropies as a Probe of the Geometry of the Universe,” Marc Kamionkowski, David N. Spergel, and Naoshi Sugiyama, *Astrophysical Journal Letters* **426**, L57–L60 (1994) [arXiv:astro-ph/9401003].
19. “CBR Anisotropy in an Open Inflation, CDM Cosmogony,” Marc Kamionkowski, Bharat Ratra, David N. Spergel, and Naoshi Sugiyama, *Astrophysical Journal Letters* **434**, L1–L4 (1994) [arXiv:astro-ph/9406069].
20. “Neutrinos from Particle Decay in the Sun and Earth,” Gerard Jungman and Marc Kamionkowski, *Physical Review D* **51**, 328–340 (1995) [arXiv:hep-ph/9407351].
21. “Microlensing by Stars,” Marc Kamionkowski, *Astrophysical Journal Letters* **442**, L9–L12 (1995) [arXiv:astro-ph/9410062].
22. “Solar Neutrinos: Radiative Corrections to Neutrino-Electron Scattering,” John N. Bahcall, Marc Kamionkowski, and Alberto Sirlin, *Physical Review D* **51**, 6146–6158 (1995) [arXiv:astro-ph/9502003].
23. “Model-Independent Comparison of Direct vs. Indirect Detection of Supersymmetric Dark Matter,” Marc Kamionkowski, Kim Griest, Gerard Jungman, and Bernard Sadoulet, *Physical Review Letters* **74**, 5174–5177 (1995) [arXiv:hep-ph/9412213].
24. “Gamma Rays from Neutralino Annihilation,” Gerard Jungman and Marc Kamionkowski, *Physical Review D* **51**, 3121–3124 (1995) [arXiv:hep-ph/9501365].
25. “Weighing the Universe with the Cosmic Microwave Background,” Gerard Jungman, Marc Kamionkowski, Arthur Kosowsky, and David N. Spergel, *Physical Review Letters* **76**, 1007–1010 (1996) [arXiv:astro-ph/9507080].
26. “Rates for Color-Shifted Microlensing Events,” Ari Buchalter, Marc Kamionkowski, and R. Michael Rich, *Astrophysical Journal* **469**, 676–690 (1996) [arXiv:astro-ph/9511034].
27. “Cosmological-Parameter Determination with Microwave Background Maps,” Gerard Jungman, Marc Kamionkowski, Arthur Kosowsky, and David N. Spergel, *Physical Review D* **54**, 1332–1344 (1996) [arXiv:astro-ph/9512139].
28. “A Low-Density Closed Universe,” Marc Kamionkowski and Nicolaos Toumbas, *Physical Review Letters* **77**, 587–590 (1996) [arXiv:astro-ph/9601147].
29. “Matter/Microwave Correlations in an Open Universe,” Marc Kamionkowski, *Physical Review D* **54**, 4169–4170 (1996) [arXiv:astro-ph/9602150].
30. “Rates for Parallax-Shifted Microlensing Events from Ground-Based Observations of the Galactic Bulge,” Ari Buchalter and Marc Kamionkowski, *Astrophysical Journal* **482**, 782–791 (1997) [arXiv:astro-ph/9604144].
31. “Comment on ‘The Dispersion Velocity of Galactic Dark Matter Particles,’ ” Evalyn Gates, Marc Kamionkowski, and Michael S. Turner, *Physical Review Letters* **78**, 2261 (1997) [arXiv:astro-ph/9606132].
32. “Indirect Detection of a Light Higgsino Motivated by Collider Data,” Katherine Freese and Marc Kamionkowski, *Physical Review D* **55**, 1771–1776 (1997) [arXiv:hep-ph/9609370].
33. “A Probe of Primordial Gravity Waves and Vorticity,” Marc Kamionkowski, Arthur Kosowsky, and Albert Stebbins, *Physical Review Letters* **78**, 2058–2061 (1997) [arXiv:astro-ph/9609132].

34. “Statistics of Cosmic Microwave Background Polarization,” Marc Kamionkowski, Arthur Kosowsky, and Albert Stebbins, *Physical Review D* **55**, 7368–7388 (1997) [arXiv:astro-ph/9611125].
35. “The Electron-Screening Correction for the Proton-Proton Reaction,” John N. Bahcall, Xuelei Chen, and Marc Kamionkowski, *Physical Review C* **57**, 2756–2759 (1998) [arXiv:astro-ph/9612209].
36. “On the Instability of the One-Texture Universe,” Xuelei Chen, Marc Kamionkowski, Mark Hindmarsh, and Andrew Liddle, *Physical Review D* **56**, 2051–2056 (1997) [arXiv:astro-ph/9702006].
37. “Astrophysical-Neutrino Detection with Energy and Angular Resolution,” Lars Bergström, Joakim Edsjö, and Marc Kamionkowski, *Astroparticle Physics* **7**, 147–160 (1997) [arXiv:astro-ph/9702037].
38. “Getting Around Cosmic Variance,” Marc Kamionkowski and Abraham Loeb, *Physical Review D* **56**, 4511–4513 (1997) [arXiv:astro-ph/9703118].
39. “Interpreting the Clustering of Radio Sources,” Catherine Cress and Marc Kamionkowski, *Monthly Notices of the Royal Astronomical Society* **297**, 486–492 (1998) [arXiv:astro-ph/9801284].
40. “Detectability of Inflationary Gravitational Waves with Microwave Background Polarization,” Marc Kamionkowski and Arthur Kosowsky, *Physical Review D* **67**, 685–691 (1998) [arXiv:astro-ph/9705219].
41. “The Proton-Proton Reaction, Solar Neutrinos, and a Relativistic Field Theoretic Model of the Deuteron,” John N. Bahcall and Marc Kamionkowski, *Nuclear Physics A* **625**, 893–895 (1997) [arXiv:astro-ph/9707320].
42. “Galactic Halo Models and Particle Dark-Matter Detection,” Marc Kamionkowski and Ali Kinkhabwala, *Physical Review D* **57**, 3256–3263 (1998) [arXiv:hep-ph/9710337].
43. “Theory and Statistics of Weak Lensing from Large-Scale Mass Inhomogeneities,” Marc Kamionkowski, Arif Babul, Catherine M. Cress, and Alexandre Refregier, *Monthly Notices of the Royal Astronomical Society* **301**, 1064–1072 (1998) [arXiv:astro-ph/9712030].
44. “Calculation of the Ostriker-Vishniac Effect in Cold Dark Matter Models,” Andrew H. Jaffe and Marc Kamionkowski, *Physical Review D* **58**, 043001 [10 pages] (1998) [arXiv:astro-ph/9801022].
45. “The First Space-Based Gravitational-Wave Detectors,” Robert R. Caldwell, Marc Kamionkowski, and Leven Wadley, *Physical Review D* **59**, 027101 [4 pages] (1999) [arXiv:astro-ph/9807319].
46. “Three-Body Annihilation of Neutralinos Below Two-Body Thresholds,” Xuelei Chen and Marc Kamionkowski, *Journal of High Energy Physics*, JHEP 07, 001 [19 pages] (1998) [arXiv:hep-ph/9805383].
47. “Weakly Nonlinear Clustering for Arbitrary Expansion Histories,” Marc Kamionkowski and Ari Buchalter, *The Astrophysical Journal* **514**, 7–11 (1999) [arXiv:astro-ph/9807211].
48. “A New Constraint to Open Cold-Dark-Matter Models,” Ali Kinkhabwala and Marc Kamionkowski, *Physical Review Letters* **82**, 4172–4175 (1999) [arXiv:astro-ph/9808320].
49. “The Power Spectrum, Bias Evolution, and the Spatial Three-Point Correlation Function,” Ari Buchalter and Marc Kamionkowski, *The Astrophysical Journal* **521**, 1–16 (1999) [arXiv:astro-ph/9903462].

50. “Cosmological Signature of New Parity-Violating Interactions,” Arthur Lue, Limin Wang, and Marc Kamionkowski, *Physical Review Letters* **83**, 1506–1509 (1999) [arXiv:astro-ph/9812088].
51. “Testing Linear-Theory Predictions of Galaxy Formation,” Ben Sugerman, Francis J. Summers, and Marc Kamionkowski, *Monthly Notices of the Royal Astronomical Society* **311**, 762–780 (2000) [arXiv:astro-ph/9909266].
52. “The Angular Three-Point Correlation Function in the Quasilinear Regime,” Ari Buchalter, Marc Kamionkowski, and Andrew Jaffe, *The Astrophysical Journal* **530**, 36–52 (2000) [arXiv:astro-ph/9903486].
53. “Cosmic Microwave Background Temperature and Polarization Anisotropy in Brans-Dicke Cosmology,” Xuelei Chen and Marc Kamionkowski, *Physical Review D* **60**, 104036 [11 pages] (1999) [arXiv:astro-ph/9905368].
54. “Large-Scale Structure, the Cosmic Microwave Background, and Primordial Non-Gaussianity,” Licia Verde, Limin Wang, Alan Heavens, and Marc Kamionkowski, *Monthly Notices of the Royal Astronomical Society (Letters)* **313**, 141–147 (2000) [arXiv:astro-ph/9906301].
55. “The Cosmic Microwave Background Bispectrum and Inflation,” Limin Wang and Marc Kamionkowski, *Physical Review D* **61**, 063504 [6 pages] (2000) [arXiv:astro-ph/9907431].
56. “The Polarization Pursuers’ Guide,” Andrew H. Jaffe, Marc Kamionkowski, and Limin Wang, *Physical Review D* **61**, 083501 [8 pages] (2000) [arXiv:astro-ph/9909281].
57. “The Dearth of Dwarf Galaxies: Is There Power on Small Scales?” Marc Kamionkowski and Andrew R. Liddle, *Physical Review Letters* **84**, 4525–2529 (2000) [arXiv:astro-ph/9911103].
58. “Two Ways of Biasing Galaxy Formation,” Paolo Catelan, Cristiano Porciani, and Marc Kamionkowski, *Monthly Notices of the Royal Astronomical Society (Letters)* **318**, L39–L44 (2000) [arXiv:astro-ph/0005544].
59. “Intrinsic and Extrinsic Galaxy Alignment,” Paolo Catelan, Marc Kamionkowski, and Roger D. Blandford, *Monthly Notices of the Royal Astronomical Society (Letters)* **320**, L7–L13 (2001) [arXiv:astro-ph/0005470].
60. “Galactosynthesis: Halo Histories, Star Formation, and Discs,” Ari Buchalter, Raul Jimenez, and Marc Kamionkowski, *Monthly Notices of the Royal Astronomical Society* **322**, 43–66 (2001) [arXiv:astro-ph/0006032].
61. “Velocity Distributions and Annual-Modulation Signatures of Weakly-interacting Massive Particles,” Piero Ullio and Marc Kamionkowski, *Journal of High Energy Physics* **0103**, 049 [16 pages] (2001) [arXiv:hep-ph/0006183].
62. “On Galaxy-Cluster Sizes and Temperatures,” Licia Verde, Marc Kamionkowski, Joseph J. Mohr, and Andrew J. Benson, *Monthly Notices of the Royal Astronomical Society Letters* **321**, L7–L13 (2001) [arXiv:astro-ph/0007426].
63. “Spin-Dependent WIMPs in DAMA?” Piero Ullio, Marc Kamionkowski, and Petr Vogel, *Journal of High Energy Physics* **0107**, 044 [10 pages] (2001) [arXiv:hep-ph/0010036].
64. “Tests for primordial non-Gaussianity,” Licia Verde, Raul Jimenez, Marc Kamionkowski, and Sabino Matarrese, *Monthly Notices of the Royal Astronomical Society Letters* **325**, 412–418 (2001) [arXiv:astro-ph/0011180].

65. “A Dark-Matter Spike at the Galactic Center?” Piero Ullio, HongSheng Zhao, and Marc Kamionkowski, *Physical Review D* **64**, 043504 [10 pages] (2001) [arXiv:astro-ph/0101481].
66. “Galactosynthesis Predictions at High Redshift,” Ari Buchalter, Raul Jimenez, and Marc Kamionkowski, *Monthly Notices of the Royal Astronomical Society* **328**, 520–526 (2001) [arXiv:astro-ph/0102025].
67. “Kinetic Decoupling of Neutralino Dark Matter,” Xuelei Chen, Marc Kamionkowski, and Xinmin Zhang, *Physical Review D* **64**, 021302 [4 pages] (2001) [arXiv:astro-ph/0103452].
68. “Spintessence! New Models for Dark Matter and Dark Energy,” Latham A. Boyle, Robert R. Caldwell, and Marc Kamionkowski, *Physics Letters B* **545**, 17–22 (2002) [arXiv:astro-ph/0105318].
69. “Theoretical Estimates of Intrinsic Galaxy Alignment,” Jonathon Mackey, Martin White, and Marc Kamionkowski, *Monthly Notices of the Royal Astronomical Society* **332**, 788–798 (2002) [arXiv:astro-ph/0106364].
70. “A Novel Antimatter Detector Based on X-ray Deexcitation of Exotic Atoms,” Kaya Mori, Charles J. Hailey, Edward A. Baltz, William W. Craig, Marc Kamionkowski, William T. Serber, and Piero Ullio, *Astrophysical Journal* **566**, 604–616 (2002) [arXiv:astro-ph/0109463].
71. “X-rays from Isolated Black Holes in the Milky Way,” by Eric Agol and Marc Kamionkowski, *Monthly Notices of the Royal Astronomical Society* **334**, 553–562 (2002) [arXiv:astro-ph/0109539].
72. “Statistics of Sunyaev-Zel’dovich Cluster Surveys,” Andrew J. Benson, Christian Reichardt, and Marc Kamionkowski, *Monthly Notices of the Royal Astronomical Society* **331**, 71–84 (2002) [arXiv:astro-ph/0110299].
73. “The Contribution of the First Stars to the Cosmic Infrared Background,” Michael R. Santos, Volker Bromm, and Marc Kamionkowski, *Monthly Notices of the Royal Astronomical Society* **336**, 1082–1092 (2002) [arXiv:astro-ph/0111467].
74. “Separation of Gravitational-Wave and Cosmic-Shear Contributions to Cosmic Microwave Background Polarization,” Michael Kesden, Asantha Cooray, and Marc Kamionkowski, *Physical Review Letters* **89**, 011304 [4 pages] (2002) [arXiv:astro-ph/0202434].
75. “Weak Gravitational Lensing by Dark Clusters,” Nevin N. Weinberg and Marc Kamionkowski, *Monthly Notices of the Royal Astronomical Society* **337**, 1269–1281 (2002) [arXiv:astro-ph/0203061].
76. “Finding Black Holes with Microlensing,” Eric Agol, Marc Kamionkowski, Leon Koopmans, and Roger D. Blandford, *Astrophysical Journal Letters* **576**, L131–134 (2002) [arXiv:astro-ph/0203257].
77. “Weak Lensing of the CMB: Cumulants of the Probability Distribution Function,” Michael Kesden, Asantha Cooray, and Marc Kamionkowski, *Physical Review D* **66**, 083007 [9 pages] (2002) [arXiv:astro-ph/0208325].
78. “Small-Scale Cosmic Microwave Background Polarization from Reionization,” Daniel Baumann, Asantha Cooray, and Marc Kamionkowski, *New Astronomy* **8**, 565–573 (2003) [arXiv:astro-ph/0208511].

79. “Aspects of the Cosmic Microwave Background Dipole,” Marc Kamionkowski and Lloyd Knox, *Physical Review D* **67**, 063001 [5 pages] (2003) [arXiv:astro-ph/0210165].
80. “Constraining Dark Energy with the Abundance of Weak Gravitational Lenses,” Nevin N. Weinberg and Marc Kamionkowski, *Monthly Notices of the Royal Astronomical Society* **341**, 251–262 (2003) [arXiv:astro-ph/0210134].
81. “Phantom Energy: Dark Energy with $w < -1$ Causes a Cosmic Doomsday,” Robert R. Caldwell, Marc Kamionkowski, and Nevin N. Weinberg, *Physical Review Letters* **91**, 071301 [4 pages] (2003) [arXiv:astro-ph/0302506].
82. “Lensing Reconstruction with CMB Temperature and Polarization,” Michael Kesden, Asantha Cooray, and Marc Kamionkowski, *Physical Review D* **67**, 123507 [12 pages] (2003) [arXiv:astro-ph/0302536].
83. “Sunyaev-Zeldovich Fluctuations from the First Stars?” Siang-Peng Oh, Asantha Cooray, and Marc Kamionkowski, *Monthly Notices of the Royal Astronomical Society (Letters)* **342**, L20–L24 (2003) [arXiv:astro-ph/0303007].
84. “Spatial Variation of the Fine-Structure Parameter and the Cosmic Microwave Background,” Kris Sigurdson, Andriy Kurylov, and Marc Kamionkowski, *Physical Review D* **68**, 103509 [16 pages] (2003) [arXiv:astro-ph/0306372].
85. “Can Cosmic Shear Shed Light on Low Cosmic Microwave Background Multipoles?,” Michael Kesden, Marc Kamionkowski, and Asantha Cooray, *Physical Review Letters* **91**, 221302 [4 pages] (2003) [arXiv:astro-ph/0306597].
86. “Generalized Analysis of Weakly-Interacting Massive Particle Searches,” Andriy Kurylov and Marc Kamionkowski, *Physical Review D* **69**, 063503 [12 pages] (2004) [arXiv:hep-ph/0307185].
87. “New Contribution to Scattering of Weakly Interacting Massive Particles on Nuclei,” Gary Prézeau, Andriy Kurylov, Marc Kamionkowski, and Petr Vogel, *Physical Review Letters* **91** [4 pages], 231301 (2003) [arXiv:astro-ph/0309115].
88. “Particle Decays During the Cosmic Dark Ages,” Xuelei Chen and Marc Kamionkowski, *Physical Review D* **70**, 043502 [13 pages] (2004) [arXiv:astro-ph/0310473].
89. “Charged-Particle Decay and Suppression of Small-Scale Power,” Kris Sigurdson and Marc Kamionkowski, *Physical Review Letters* **92**, 171302 [4 pages] (2004) [arXiv:astro-ph/0311486].
90. “Expansion, Geometry, and Gravity,” Robert R. Caldwell and Marc Kamionkowski, *Journal of Cosmology and Astroparticle Physics* **09**, 009 (2004) [arXiv:astro-ph/0403003].
91. “Dynamical-Friction Galaxy-Gas Coupling and Cluster Cooling Flows,” Amr El-Zant, Woong-Tae Kim, and Marc Kamionkowski, *Monthly Notices of the Royal Astronomical Society* **354**, 169–175 (2004) [arXiv:astro-ph/0403696].
92. “Dark-Matter Electric and Magnetic Dipole Moments,” Kris Sigurdson, Michael Doran, Andriy Kurylov, Robert R. Caldwell, and Marc Kamionkowski, *Physical Review D* **70**, 083501 [15 pages] (2004) [arXiv:astro-ph/0406355].
93. “Self-Consistent Theory of Halo Mergers,” Andrew Benson, Marc Kamionkowski, and Steven H. Hassani, *Monthly Notices of the Royal Astronomical Society* **357**, 847–858 (2005) [arXiv:astro-ph/0407136].

94. “A Running Spectral Index in Supersymmetric Dark-Matter Models with Quasi-Stable Charged Particles,” Stefano Profumo, Kris Sigurdson, Piero Ullio, and Marc Kamionkowski, *Physical Review D* **71**, 023518 [15 pages] (2005) [arXiv:astro-ph/0410714].
95. “Gravitational-Wave Signature of an Inspiral into a Supermassive Horizonless Object,” Michael Kesden, Jonathon Gair, and Marc Kamionkowski, *Physical Review D* **71**, 044015 [15 pages] (2005) [arXiv:astro-ph/0411478].
96. “Highly-Ionized Oxygen Absorbers in the Intergalactic Medium,” Steven R. Furlanetto, L. Arielle Phillips, and Marc Kamionkowski, *Monthly Notices of the Royal Astronomical Society* **359**, 295–307 (2005) [arXiv:astro-ph/0412351].
97. “Cosmic Microwave Background Fluctuations from Gravitational Waves: An Analytic Approach,” Jonathon R. Pritchard and Marc Kamionkowski, *Annals of Physics* **318**, 2–36 (2005) [arXiv:astro-ph/0412581].
98. “Cosmic Shear of the Microwave Background: The Curl Diagnostic,” Asantha Cooray, Marc Kamionkowski, and Robert R. Caldwell, *Physical Review D* **71**, 123527 [8 pages] (2005) [arXiv:astro-ph/0503002].
99. “Direct Detection of the Inflationary Gravitational-Wave Background,” Tristan L. Smith, Marc Kamionkowski, and Asantha Cooray, *Physical Review D* **73**, 023504 [14 pages] (2006) [arXiv:astro-ph/0506422].
100. “Dynamical Friction and Cooling Flows in Galaxy Clusters,” Woong-Tae Kim, Amr A. El-Zant, and Marc Kamionkowski, *The Astrophysical Journal* **632**, 157–168 (2005) [arXiv:astro-ph/0506579].
101. “Pair Correlations and Merger Bias,” Steven R. Furlanetto and Marc Kamionkowski, *Monthly Notices of the Royal Astronomical Society* **366**, 529–536 (2006) [arXiv:astro-ph/0507650].
102. “Cluster Magnetic Fields from Large-Scale-Structure and Galaxy-Cluster Shocks,” Mikhail Medvedev, Luis O. Silva, and Marc Kamionkowski, *Astrophysical Journal Letters* **642**, L1–L4 (2006) [arXiv:astro-ph/0512079].
103. “Dark Matter and the CACTUS Gamma-Ray Excess from Draco,” Stefano Profumo and Marc Kamionkowski, *Journal of Cosmology and Astroparticle Physics* **0603**, 003 [22 pages] (2006) [arXiv:astro-ph/0601249].
104. “A New Cosmic Microwave Background Constraint to Primordial Gravitational Waves,” Tristan L. Smith, Elena Pierpaoli, and Marc Kamionkowski, *Physical Review Letters* **97**, 021301 [4 pages] (2006) [arXiv:astro-ph/0603144].
105. “What Mass Are the Smallest Protohalos?” Stefano Profumo, Kris Sigurdson, and Marc Kamionkowski, *Physical Review Letters* **97**, 031301 [4 pages] (2006) [arXiv:astro-ph/0603373].
106. “Supermassive Black Hole Merger Rates: Uncertainties from Halo Merger Theory,” Adrienne L. Erickcek, Marc Kamionkowski, and Andrew J. Benson, *Monthly Notices of the Royal Astronomical Society* **371**, 1992–2000 (2006) [arXiv:astro-ph/0604281].
107. “Galaxy Surveys, Inhomogeneous Reionization, and Dark Energy,” Jonathon R. Pritchard, Steven R. Furlanetto, and Marc Kamionkowski, *Monthly Notices of the Royal Astronomical Society* **374**, 159–167 (2007) [arXiv:astro-ph/0604358].

108. “Cosmological Bounds on Dark-Matter–Neutrino Interactions,” Gianpiero Mangano, Alessandro Melchiorri, Paolo Serra, Asantha Cooray, and Marc Kamionkowski, *Physical Review D* **74**, 043517 [10 pages] (2006) [arXiv:astro-ph/0606190].
109. “Galilean Equivalence for Galactic Dark Matter,” Michael Kesden and Marc Kamionkowski, *Physical Review Letters* **97**, 131303 [4 pages] (2006) [arXiv:astro-ph/0606566].
110. “Tidal Tails Test the Equivalence Principle in the Dark Sector,” Michael Kesden and Marc Kamionkowski, *Physical Review D* **74**, 083007 [20 pages] (2006) [arXiv:astro-ph/0608095].
111. “Search with EGRET for a Gamma-Ray Line from the Galactic Center,” Anthony R. Pullen, Ranga-Ram Chary, and Marc Kamionkowski, *Physical Review D* **76**, 063006 [8 pages] (2007) [arXiv:astro-ph/0610295].
112. “Solar System Tests *DO* Rule Out $1/R$ Gravity,” Adrienne L. Erickcek, Tristan L. Smith, and Marc Kamionkowski, *Physical Review D (Rapid Communications)* **74**, 121501(R) [4 pages] (2006) [arXiv:astro-ph/0610483].
113. “A Telescope Search for Decaying Relic Axions,” Daniel Grin, Giovanni Covone, Jean-Paul Kneib, Marc Kamionkowski, Andrew Blain, and Eric Jullo, *Physical Review D* **75**, 105018 [6 pages] (2007) [arXiv:astro-ph/0611502].
114. “Constraints on Radiative Dark-Matter Decay from the Cosmic Microwave Background,” Le Zhang, Xuelei Chen, Marc Kamionkowski, Zong-gui Si, and Zheng Zheng, *Physical Review D* **76**, 061301(R) [4 pages] (2007) [arXiv:0704.2444 [astro-ph]].
115. “A Red Density Perturbation Spectrum and Inflationary Gravitational Waves,” Luca Pagano, Asantha Cooray, Alessandro Melchiorri, and Marc Kamionkowski, *Journal of Cosmology and Astroparticle Physics* **04**, 009 (2008) [arXiv:0707.2560 [astro-ph]].
116. “The Effects of Chern-Simons Gravity on Bodies Orbiting the Earth,” T. L. Smith, A. L. Erickcek, R. R. Caldwell, and M. Kamionkowski, *Physical Review D* **77**, 024105 [9 pages] (2008) [arxiv:0708.0001 [astro-ph]].
117. “Cosmic Microwave Background Statistics for a Direction-Dependent Primordial Power Spectrum,” Anthony Pullen and Marc Kamionkowski, *Physical Review D* **76**, 103529 [8 pages] (2007) [arXiv:0709.1144 [astro-ph]].
118. “Nonlinear Evolution of Anisotropic Power,” Shin’ichiro Ando and Marc Kamionkowski, *Physical Review Letters* **100**, 071301 [4 pages] (2008) [arXiv:0711.0779 [astro-ph]].
119. “Axion Constraints in Non-Standard Thermal Histories,” Daniel Grin, Tristan L. Smith, and Marc Kamionkowski, *Physical Review D* **77**, 085020 [10 pages] (2008) [arXiv:0711.1352 [astro-ph]].
120. “Galactic Substructure and Direct Detection of Dark Matter,” Marc Kamionkowski and Savvas M. Koushiappas, *Physical Review D* **77**, 103509 [11 pages] (2008) [arXiv:0801.269 [astro-ph]].
121. “The Inflationary Gravitational-Wave Background and Measurements of the Scalar Spectral Index,” Tristan L. Smith, Marc Kamionkowski, and Asantha Cooray, *Physical Review D* **78**, 083525 [9 pages] (2008) [arXiv:0802.1530 [astro-ph]].
122. “Dynamical and Gravitational Instability of Oscillating-Field Dark Energy and Dark Matter,” Matthew C. Johnson and Marc Kamionkowski, *Physical Review D* **78**, 063010 (2008) [arXiv:0805.1748 [astro-ph]].

123. “Very Broad [O III] $\lambda\lambda$ 4959,5007 Emission from the NGC 4472 Globular Cluster RZ2109 and Implications for the Mass of its Black Hole X-ray Source,” Stephen E. Zepf, Daniel Stern, Thomas J. Maccarone, Arunav Kundu, Marc Kamionkowski, Katherine L. Rhode, John J. Salzer, Robin Ciardullo, and Caryl Gronwall, *The Astrophysical Journal Letters* **683**, L139–L142 (2008) [arXiv:0805.2952 [astro-ph]].
124. “A Hemispherical Power Asymmetry from Inflation,” Adrienne L. Erickcek, Marc Kamionkowski, and Sean M. Carroll, *Physical Review D* **78**, 123520 [5 pages] (2008) [arXiv:0806.0377 [astro-ph]].
125. “Oscillations in the Inflaton Potential?” Cédric Pahud, Marc Kamionkowski, and Andrew R. Liddle, *Physical Review D* **79**, 083503 [6 pages] (2009) [arXiv:0807.0322 [astro-ph]].
126. “Superhorizon Perturbations and the Cosmic Microwave Background,” Adrienne L. Erickcek, Sean M. Carroll, and Marc Kamionkowski, *Physical Review D* **78**, 083012 [11 pages] (2008) [arXiv:0808.1570 [astro-ph]].
127. “The New DAMA Dark-Matter Window and Energetic-Neutrino Searches,” Dan Hooper, Frank Petriello, Kathryn M. Zurek, and Marc Kamionkowski, *Physical Review D* **79**, 015010 [7 pages] (2009) [arXiv:0808.2464 [hep-ph]].
128. “The Void Abundance with Non-Gaussian Primordial Perturbations,” Marc Kamionkowski, Licia Verde, and Raul Jimenez, *Journal of Cosmology and Astro-Particle Physics* **01**, 010 [11 pages] (2009) [arXiv:0809.0506 [astro-ph]].
129. “Can Proper Motions of Dark-Matter Subhalos Be Detected?” Shin’ichiro Ando, Marc Kamionkowski, Samuel K. Lee, and Savvas Koushiappas, *Physical Review D* **78**, 101301(R) [4 pages] (2008) [arXiv:0809.0886 [astro-ph]].
130. “The Gamma-Ray-Flux Probability Distribution Function from Galactic Halo,” Samuel K. Lee, Shin’ichiro Ando, and Marc Kamionkowski, *Journal of Cosmology and Astro-Particle Physics* **0907**, 007 [19 pages] (2009) [arXiv:0810.1284 [astro-ph]].
131. “How to Derotate the Cosmic Microwave Background Polarization,” Marc Kamionkowski, *Physical Review Letters* **102**, 111302 [4 pages] (2009) [arXiv:0810.1286 [astro-ph]].
132. “Early Annihilation and Diffuse Backgrounds in $1/v$ WIMP Models,” Marc Kamionkowski and Stefano Profumo, *Physical Review Letters* **101**, 261301 [4 pages] (2008) [arXiv:0810.3233 [astro-ph]].
133. “Dark Matter and Dark Radiation,” Lotty Ackerman, Matthew R. Buckley, Sean M. Carroll, and Marc Kamionkowski, *Physical Review D* **79**, 023519 [12 pages] (2009) [arXiv:0810.5126 [hep-ph]].
134. “De-Rotation of the Cosmic Microwave Background Polarization: Full-Sky Formalism,” Vera Gluscevic, Marc Kamionkowski, and Asantha Cooray, *Physical Review D* **80**, 023510 [13 pages] (2009) [arXiv:0905.1687 [astro-ph]].
135. “A Scale-Dependent Power Asymmetry from Isocurvature Perturbations,” Adrienne L. Erickcek, Christopher M. Hirata, and Marc Kamionkowski, *Physical Review D* **80**, 083507 [17 pages] (2009) [arXiv:0907.0705 [astro-ph]].
136. “Cosmic Chronometers: Constraining the Equation of State of Dark Energy. I: $H(z)$ Measurements,” Daniel Stern, Raul Jimenez, Licia Verde, Marc Kamionkowski, and S.

- Adam Stanford, *Journal of Cosmology and Astro-Particle Physics* **1002**, 008 [27 pages] (2010) [arXiv:0907.3149 [astro-ph]].
137. “Cosmic Chronometers: Constraining the Equation of State of Dark Energy. II. A Spectroscopic Catalog of Red Galaxies in Galaxy Clusters,” Daniel Stern, Raul Jimenez, Licia Verde, S. Adam Stanford, and Marc Kamionkowski, *The Astrophysical Journal (Supplement)* **188**, 280–289 (2010) [arXiv:0907.3152 [astro-ph]].
 138. “Galactic Substructure and Energetic Neutrinos from the Sun and the Earth,” Savvas M. Koushiappas and Marc Kamionkowski, *Physical Review Letters* **103**, 121301 [4 pages] (2009) [arXiv:0907.4778 [astro-ph]].
 139. “Neutrino Oscillations, Lorentz/*CPT* Violation, and Dark Energy,” Shin’ichiro Ando, Marc Kamionkowski, and Irina Mocioiu, *Physical Review D* **80**, 123522 [9 pages] (2009) [arXiv:0910.4391 [hep-ph]].
 140. “Galactic Substructure and Dark Matter Annihilation in the Milky Way Halo,” Marc Kamionkowski, Savvas M. Koushiappas, and Michael Kuhlen, *Physical Review D* **81**, 043532 [10 pages] (2010) [arXiv:1001.3144 [astro-ph]].
 141. “Testing Parity-Violating Mechanisms with Cosmic Microwave Background Experiments,” Vera Gluscevic and Marc Kamionkowski, *Physical Review D* **81**, 123529 [8 pages] (2010) [arXiv:1002.1308 [astro-ph]].
 142. “Dark-Matter Decays and Self-Gravitating Halos,” Annika H. G. Peter, Christopher, E. Moody, and Marc Kamionkowski, *Physical Review D* **81**, 103501 [17 pages] (2010) [arXiv:1003.0419 [astro-ph]].
 143. “Non-Gaussianity from Self-Ordering Scalar Fields,” Daniel G. Figueroa, Robert R. Caldwell, and Marc Kamionkowski, *Physical Review D* **81**, 123504 [11 pages] (2010) [arXiv:1003.0672 [astro-ph]].
 144. “Non-Uniform Cosmological Birefringence and Active Galactic Nuclei,” Marc Kamionkowski, *Physical Review D* **82**, 047302 [4 pages] (2010) [arXiv:1004.3544 [astro-ph]].
 145. “Light Gravitinos at Colliders and Implications for Cosmology,” Jonathan L. Feng, Marc Kamionkowski, and Samuel K. Lee, *Physical Review D*, **82**, 015012 [12 pages] (2010) [arXiv:1004.4213 [hep-ph]].
 146. “Halo Clustering with Non-Local Non-Gaussianity,” Fabian Schmidt and Marc Kamionkowski, *Physical Review D* **82**, 103002 [12 pages] (2010) [arXiv:1008.0638 [astro-ph]].
 147. “The CMB Bispectrum, Trispectrum, non-Gaussianity, and the Cramer-Rao Bound,” Marc Kamionkowski, Tristan L. Smith, and Alan Heavens, *Physical Review D* **83** 023007 [10 pages] (2011) [arXiv:1010.0251 [astro-ph]].
 148. “The Odd-Parity CMB Bispectrum,” Marc Kamionkowski and Tarun Souradeep, *Physical Review D* **83**, 027301 [4 pages] (2011) [arXiv:1010.4304 [astro-ph]].
 149. “Metals at the Surface of Last Scatter,” Yacine Ali-Haïmoud, Christopher M. Hirata, and Marc Kamionkowski, *Physical Review D* **83**, 083508 [6 pages] (2011) [arXiv:1102.0004 [astro-ph]].
 150. “The Probability Distribution for Non-Gaussianity Estimators,” Tristan L. Smith, Marc Kamionkowski, and Benjamin D. Wandelt, *Physical Review D* **84**, 063013 [10 pages] (2011) [arXiv:1104.0930 [astro-ph]].

151. “Cross-Correlation of Cosmological Birefringence with CMB Temperature,” Robert R. Caldwell, Vera Gluscevic, and Marc Kamionkowski, *Physical Review D* **84**, 043504 [9 pages] (2011) [arXiv:1104.1634 [astro-ph]].
152. “Do Baryons Trace Dark Matter in the Early Universe?” Daniel Grin, Olivier Doré, and Marc Kamionkowski, *Physical Review Letters* **107**, 261301 [4 pages] (2011) [arXiv:1107.1716 [astro-ph]].
153. “Compensated Isocurvature Perturbations and the Cosmic Microwave Background,” *Physical Review D* **84**, 123003 [21 pages] (2011) [arXiv:1107.5047 [astro-ph]].
154. “Odd-Parity Bipolar Spherical Harmonics,” Laura G. Book, Marc Kamionkowski, and Tarun Souradeep, *Physical Review D* **85**, 023010 [13 pages] (2012) [arXiv:1109.2910 [astro-ph]].
155. “Correlation of inflation-produced magnetic fields with scalar fluctuations,” Robert R. Caldwell, Leonardo Motta, and Marc Kamionkowski, *Physical Review D* **84**, 123525 [10 pages] (2012) [arXiv:1109.4415 [astro-ph]].
156. “Charged Particle Decay at Finite Temperature,” Andrzej Czarnecki, Marc Kamionkowski, Samuel K. Lee, and Kirill Melnikov, *Physical Review D* **85**, 025018 [9 pages] (2012) [arXiv:1110.2171 [hep-ph]].
157. “Lensing of 21-cm Fluctuations by Primordial Gravitational Waves,” Laura Book, Marc Kamionkowski, and Fabian Schmidt, *Physical Review Letters* **108**, 211301 [4 pages] (2012) [arXiv:1112.0567 [astro-ph]].
158. “Improved Constraints on the Expansion Rate of the Universe up to $z \sim 1.1$ from the Spectroscopic Evolution of Cosmic Chronometers,” M. Moresco et al., *Journal of Cosmology and Astroparticle Physics* **1208**, 006 [37 pages] (2012) [arXiv:1201.3609 [astro-ph.CO]].
159. “Dark Matter Detection with Polarized Detectors,” Chi-Ting Chiang, Marc Kamionkowski, and Gordan Z. Krnjaic, *Phys. Dark Univ.* **1**, 109 [7 pages] (2012) [arXiv:1202.1807 [astro-ph.CO]].
160. “Clustering Fossils from the Early Universe,” Donghui Jeong and Marc Kamionkowski, *Physical Review Letters* **108**, 251301 [4 pages] (2012) [arXiv:1203.0302 [astro-ph.CO]].
161. “The Probability Distribution for non-Gaussianity Estimators Constructed from the CMB Trispectrum,” Tristan L. Smith and Marc Kamionkowski, *Physical Review D* **86**, 063009 [9 pages] (2012) [arXiv:1203.6654 [astro-ph]].
162. “First CMB Constraints on Direction-Dependent Cosmological Birefringence from WMAP-7,” Vera Gluscevic, Duncan Hanson, Marc Kamionkowski, and Christopher M. Hirata, *Physical Review D* **86**, 103529 [14 pages] (2012) [arXiv:1206.5546 [astro-ph]].
163. “Vacuum Instability in Chern-Simons Gravity,” Sergei Dyda, Eanna Flanagan, and Marc Kamionkowski, *Physical Review D* **86**, 124031 [7 pages] (2012) [arXiv:1208.4871 [gr-qc]].
164. “Total Angular Momentum Waves for Scalar, Vector, and Tensor Fields,” Liang Dai, Marc Kamionkowski, and Donghui Jeong, *Physical Review D* **86**, 125013 [27 pages] (2012) [arXiv:1209.0761 [astro-ph]].
165. “Galaxy-Cluster Masses Via 21st-Century Measurements of Lensing of 21-cm Fluctuations,” Ely D. Kovetz and Marc Kamionkowski, *Physical Review D* **87**, 063516 [9 pages] (2013) [arXiv:1210.3041 [astro-ph.CO]].

166. “Patchy Screening of the Cosmic Microwave Background by Inhomogeneous Reionization,” Vera Gluscevic, Marc Kamionkowski, and Duncan Hanson, *Physical Review D* **87**, 047303 [5 pages] (2013) [arXiv:1210.5507 [astro-ph]].
167. “An Improved Estimator for Non-Gaussianity in Cosmic Microwave Background Observations,” Tristan L. Smith, Daniel Grin, and Marc Kamionkowski, *Physical Review D* **87**, 063003 [16 pages] (2013) [arXiv:1211.3417 [astro-ph.CO]].
168. “21-cm Lensing and the Cold Spot in the Cosmic Microwave Background, Ely D. Kovetz and Marc Kamionkowski, *Physical Review Letters* **110** 171301 [4 pages] (2013) [arXiv:1211.4610 [astro-ph.CO]].
169. “The Wigner-Eckart Theorem in Cosmology,” Liang Dai, Donghui Jeong, and Marc Kamionkowski, *Physical Review D* **87**, 043504 [16 pages] (2013) [arXiv:1211.6110 [astro-ph.CO gr-qc]].
170. “What if Planck’s Universe Isn’t Flat?” Philip Bull and Marc Kamionkowski, *Physical Review D* **87**, 081301 [5 pages] (2013) [arXiv:1302.1617 [astro-ph.CO gr-qc]].
171. “Seeking Inflation Fossils in the Cosmic Microwave Background,” Liang Dai, Donghui Jeong, and Marc Kamionkowski, *Physical Review D* **87**, 103006 [10 pages] (2013) [arXiv:1302.1868 [astro-ph.CO]].
172. “The Pesky Power Asymmetry,” Liang Dai, Donghui Jeong, Marc Kamionkowski, and Jens Chluba, *Physical Review D* **87**, 123005 [5 pages] (2013) [arXiv:1303.6949 [astro-ph.CO]].
173. “Oscillations and Stability of Polytropic Filaments,” Patrick C. Breysse, Marc Kamionkowski, and Andrew Benson, *Monthly Notices of the Royal Astronomical Society* **437**, 2675–2685 (2014) [arXiv:1305.2198 [astro-ph.CO]].
174. “The Anisotropic Imprint of Long-Wavelength Tensor Perturbations on Cosmic Structure,” Liang Dai, Donghui Jeong, and Marc Kamionkowski, *Physical Review D* **88**, 043507 [18 pages] (2013) [arXiv:1306.3985 [astro-ph.CO]].
175. “Baryons Do Trace Dark Matter 380,000 years after the big bang: Search for compensated isocurvature perturbations with WMAP 9-year data,” Dan Grin, Duncan Hanson, Gilbert Holder, Olivier Doré, and Marc Kamionkowski, *Physical Review D* **89**, 023006 [15 pages] (2014) [arXiv:1306.4319 [astro-ph.CO]].
176. “Cosmic Bandits: Exploration versus Exploitation in CMB B-Mode Experiments,” Ely D. Kovetz and Marc Kamionkowski, *New Astronomy* **43**, 26–36 (2016) [arXiv:1308.1404 [astro-ph.IM]].
177. “Multiple Scattering Sunyaev-Zeldovich Signal I: Lowest Order Effect,” Jens Chluba, Liang Dai, and Marc Kamionkowski, *Monthly Notices of the Royal Astronomical Society* **437**, 67–76 (2014) [arXiv:1308.5969 [astro-ph.CO]].
178. “The Effect of Aberration on Partial-Sky Measurements of the Cosmic Microwave Background Temperature Power Spectrum,” Donghui Jeong, Jens Chluba, Liang Dai, Marc Kamionkowski, and Xin Wang, *Physical Review D* **89** 023003 [13 pages] (2014) [arXiv:1309.2285 [astro-ph.CO]].
179. “Constraining Dark Matter-Baryon Scattering with Linear Cosmology,” Cora Dvorkin, Kfir Blum, and Marc Kamionkowski, *Physical Review D* **89**, 023519 [12 pages] (2014) [arXiv:1311.2937 [astro-ph.CO]].

180. “Silk Damping at a Redshift of a Billion: a New Limit on Small-Scale Adiabatic Perturbations,” Donghui Jeong, Josef Pradler, Jens Chluba, and Marc Kamionkowski, *Physical Review Letters* **113**, 061301 [5 pages] (2014) [arXiv:1403.3697 [astro-ph.CO]].
181. “Linking the BICEP2 Result and the Hemispherical Power Asymmetry through Spatial Variation of r ,” Jens Chluba, Liang Dai, Donghui Jeong, Marc Kamionkowski, and Amanda Yoho, *Monthly Notices of the Royal Astronomical Society* **442**, 670–673 (2014) [arXiv:1404.2798 [astro-ph.CO]].
182. “Tensor-induced B modes with no Temperature Fluctuations,” Marc Kamionkowski, Liang Dai, and Donghui Jeong, *Physical Review D* **89**, 107302 [5 pages] (2014) [arXiv:1404.3730 [astro-ph.CO]].
183. “Reheating Constraints to Inflationary Models,” Liang Dai, Marc Kamionkowski, and Junpu Wang, *Physical Review Letters* **113**, 041302 [5 pages] (2014) [arXiv:1404.6704 [astro-ph.CO]].
184. “Carbon Monoxide Intensity Mapping at Moderate Redshifts,” Patrick C. Breysse, Ely D. Kovetz, and Marc Kamionkowski, *Monthly Notices of the Royal Astronomical Society* **443**, 3506–3512 (2014) [arXiv:1405.0489 [astro-ph.CO]].
185. “Spectral Distortions from the Dissipation of Tensor Perturbations,” Jens Chluba, Liang Dai, Daniel Grin, Mustafa Amin, and Marc Kamionkowski, *Monthly Notices of the Royal Astronomical Society* **446**, 2871–2886 (2015) [arXiv:1407.3653 [astro-ph.CO]].
186. “Inflationary Tensor Fossils in Large-Scale Structure,” Emanuela Dimastrogiovanni, Matteo Fasiello, Donghui Jeong, and Marc Kamionkowski, *Journal of Cosmology and Particle Astrophysics* **12**, 050 [30 pages] (2014) [arXiv:1407.8204 [astro-ph.CO]].
187. “Statistical diagnostics to identify Galactic foregrounds in B-mode maps,” Marc Kamionkowski and Ely D. Kovetz, *Physical Review Letters* **113**, 191303 [5 pages] (2014) [arXiv:1408.4125 [astro-ph.CO]]. (Selected for a *Synopsis* at *Physical Review Letters*.)
188. “The Redshift-Space Galaxy Two-Point Correlation Function and Baryon Acoustic Oscillations,” Donghui Jeong, Liang Dai, Marc Kamionkowski, and Alexander S. Szalay, *Monthly Notices of the Royal Astronomical Society* **449**, 3312–3322 (2015) [arXiv:1408.4648 [astro-ph.CO]].
189. “Dark Energy from the String Axiverse,” Marc Kamionkowski, Josef Pradler, and Devin G. E. Walker, *Physical Review Letters* **113**, 251302 (2014) [5 pages] [arXiv:1409.0549 [hep.ph]].
190. “The Equation-of-State Parameter for Reheating,” Julian B. Munoz and Marc Kamionkowski, *Physical Review D* **91**, 043521 [7 pages] [arXiv:1412.0656 [astro-ph.CO]].
191. “An Ultimate Target for Dark Matter Searches,” Kfir Blum, Yanou Cui, and Marc Kamionkowski, *Physical Review D* **92**, 023528 [6 pages] (2015) [arXiv:1412.3463 [hep-ph]].
192. “A Strategy to Minimize Dust Foregrounds in B-mode Searches,” Ely Kovetz and Marc Kamionkowski, *Physical Review D (Rapid Communications)* **91**, 081303(R) [6 pages] (2015) [arXiv:1502.00625 [astro-ph.CO]].
193. “Detecting the Integrated Sachs-Wolfe effect with high-redshift 21-cm surveys,” Alvis Raccanelli, Ely Kovetz, Liang Dai, and Marc Kamionkowski, arXiv:1502.03107 [astro-ph.CO]. Submitted to *Physical Review D*.

194. “Masking Line Foregrounds in Intensity Mapping Surveys,” Patrick Breysse, Ely Kovetz, and Marc Kamionkowski, *Monthly Notices of the Royal Astronomical Society* **452**, 3408–3418 (2015) [arXiv:1503.05202 [astro-ph.CO]].
195. “Probing the Scale Dependence of non-Gaussianity with Spectral Distortions of the Cosmic Microwave Background,” Razieh Emami, Ema Dimastrogiovanni, Jens Chluba, and Marc Kamionkowski, *Physical Review D* **91**, 123531 [6 pages] (2015) [arXiv:1504.00675 [astro-ph.CO]].
196. “Imprints of Massive Primordial Fields on Large-Scale Structure,” Ema Dimastrogiovanni, Matteo Fasiello, and Marc Kamionkowski, *Journal of Cosmology and Astroparticle Physics* **02**, 017 [21 pages] (2016) [arXiv:1504.05993 [astro-ph.CO]].
197. “Primordial Non-Gaussianity from the Bispectrum of 21-cm fluctuations in the dark ages,” Julian B. Muñoz, Yacine Ali-Haïmoud, and Marc Kamionkowski, *Physical Review D* **92**, 083508 [15 pages] (2015) (Editor’s Suggestion) [arXiv:1506.04152 [astro-ph.CO]].
198. “Constraints on Dark Matter Interactions with Standard Model Particles from CMB Spectral Distortions,” Yacine Ali-Haïmoud, Jens Chluba, and Marc Kamionkowski, *Physical Review Letters* **115**, 071304 [5 pages] (2015) [arXiv:1506.04745 [astro-ph.CO]].
199. “Antisymmetric Galaxy Cross-Correlations as a cosmological probe,” Liang Dai, Marc Kamionkowski, Ely D. Kovetz, Alvise Raccanelli, and Maresuke Shiraishi, *Physical Review D* **93**, 023507 [6 pages] (2016) [arXiv:1507.05618 [astro-ph]].
200. “The High-Redshift Star-Formation History from Carbon-Monoxide Intensity Maps,” Patrick C. Breysse, Ely D. Kovetz, and Marc Kamionkowski, *Monthly Notices of the Royal Astronomical Society (Letters)* **457**, L127–L131 (2016) [arXiv:1507.06304 [astro-ph.CO]].
201. “Search for Compensated Isocurvature Perturbations with Planck Spectra,” Julian Muñoz, Daniel Grin, Liang Dai, Marc Kamionkowski, and Ely D. Kovetz, *Physical Review D* **93**, 043008 [9 pages] (2016) [arXiv:1511.04441 [astro-ph.CO]].
202. “Ultra-high-energy Cosmic-ray Hot Spots from Tidal Disruption Events,” Daniel N. Pfeffer, Ely Kovetz, and Marc Kamionkowski, arXiv:1512.04959 [astro-ph.HE]. Submitted to *Monthly Notices of the Royal Astronomical Society*.
203. “Did LIGO Detect Dark Matter?” Simeon Bird, Ilias Cholis, Julian B. Muñoz, Yacine Ali-Haïmoud, Marc Kamionkowski, Ely D. Kovetz, Alvise Raccanelli, and Adam G. Riess, arXiv:1603.00464 [astro-ph.CO]. Submitted to *Physical Review Letters*.
204. “Violation of Statistical Isotropy and Homogeneity in the 21-cm power spectrum,” Maresuke Shiraishi, Julian B. Muñoz, Marc Kamionkowski, and Alvise Raccanelli, arXiv:1603.01206 [astro-ph.CO].

Review Articles:

1. “Supersymmetric Dark Matter,” Gerard Jungman, Marc Kamionkowski, and Kim Griest, *Physics Reports* **267**, 195–373 (1996) [arXiv:hep-ph/9506380].
2. “Solar Fusion Cross Sections,” E. G. Adelberger et al., *Reviews of Modern Physics* **70**, 1265–1292 (1998) [arXiv:astro-ph/9707320].

3. “The Cosmic Microwave Background and Particle Physics,” Marc Kamionkowski and Arthur Kosowsky, *Annual Reviews of Nuclear and Particle Science* **49**, 77–123 (1999) [arXiv:astro-ph/9904108].
4. “Report of the Dark Energy Task Force,” A. Albrecht et al., astro-ph/0609591.
5. “Dark Matter and Dark Energy,” Marc Kamionkowski, in “Visions of Discovery: New Light on Physics, Cosmology, and Consciousness,” edited by R. Y. Chiao, M. L. Cohen, A. J. Leggett, W. D. Phillips, and C. L. Harper, Jr. (Cambridge University Press, Cambridge, 2011), p. 247–293.
6. “The Physics of Cosmic Acceleration,” Robert R. Caldwell and Marc Kamionkowski, *Annual Reviews of Nuclear and Particle Science* **59**, 397–429 (2009) [arXiv:0903.0866 [astro-ph]].
7. “Dark Matter Astrophysics,” Guido D’Amico, Marc Kamionkowski, and Kris Sigurdson, arXiv:0907.1912. To appear in “Dark Matter and Dark Energy: A New Challenge for the 21st Century,” proceedings of the Villa Olmo School, 14–18 May 2007, Como, Italy, edited by V. Gorini, S. Matarrese and U. Moschella.
8. “The Quest for B Modes From Inflationary Gravitational Waves,” Marc Kamionkowski and Ely D. Kovetz, arXiv:1510.06042 [astro-ph]. To appear in *Annual Reviews of Astronomy and Astrophysics*.

Conference, Workshop, and Summer-School Proceedings:

1. “Cosmic-Ray Energy Spectra between Ten and Several Hundred GeV/amu for Elements from ^{18}Ar to ^{28}Ni : Results from HEAO-3,” M. H. Israel, M. Jones, M. P. Kamionkowski, J. Klarmann, E. C. Stone, C. J. Waddington, W. R. Binns, and T. L. Garrard, in Proceedings of the 20th International Cosmic-Ray Conference **1**, OG-4.1-4 (1987).
2. “Indirect Detection of Heavy Supersymmetric Dark Matter,” Marc Kamionkowski, *Trends in Astroparticle Physics*, edited by D. B. Cline and R. Peccei (World Scientific, Singapore, 1992), p. 58–62.
3. “Supersymmetric Dark Matter,” Marc Kamionkowski, in *High Energy Neutrino Astrophysics*, edited by V. J. Stenger, J. G. Learned, S. Pakvasa, and X. Tata (World Scientific, Singapore, 1992), p. 157–172.
4. “Evolution of Electroweak Bubbles,” Marc Kamionkowski and Katherine Freese, in *The Fermilab Meeting, DPF ’92*, edited by C. H. Albright, P. H. Kasper, R. Raja, and J. Yoh (World Scientific, Singapore, 1993), p. 1409–1411.
5. “Microwave Background Fluctuations in an Open Universe,” David N. Spergel, Ue-Li Pen, Marc Kamionkowski, and Naoshi Sugiyama, in proceedings of the Nishinomiya Yukawa Memorial Symposium, Nishinomiya, Japan, October, 1994, edited by M. Sasaki (University Academic Press, Tokyo, 1994). [arXiv:astro-ph/9402060].
6. “Implications of Recent Nucleon Spin Structure Measurements for Neutralino Dark Matter Detection,” Marc Kamionkowski, Lawrence Krauss, and M. Ted Ressel, IASSNS-HEP-94/14, hep-ph/9402353.
7. “Diffuse Cosmic Gamma Rays from WIMP Decay and Annihilation,” Marc Kamionkowski, in *The Gamma-Ray Sky with Compton GRO and SIGMA*, proceedings of the NATO Advanced Study Institute, Les Houches, France, January 25–February 4, 1994, edited by

- M. Signore, P. Salati, and G. Vedrenne (Kluwer Academic, Dordrecht, 1995), p. 113–134 [arXiv:astro-ph/9404079].
8. “Indirect Detection of WIMPs,” Marc Kamionkowski, in *Particle Astrophysics, Atomic Physics, and Gravitation*, proceedings of the XXIXth Rencontre de Moriond, Villars sur Ollon, Switzerland, January 22–29, 1994, edited by J. Tran Thanh Van, G. Fontaine, and E. Hinds (Editions Frontieres, Gif-sur-Yvette, 1994), p. 169–177 [arXiv:hep-ph/9403357].
 9. “Cosmic Microwave Background Anisotropies and the Geometry of the Universe,” Marc Kamionkowski, in *CMB Anisotropies Two Years After COBE: Observations, Theory, and the Future*, proceedings of the 1994 CWRU workshop, April 22–24, 1994, Cleveland, OH, edited by L. M. Krauss (World Scientific, Singapore, 1994), p. 141–148 [arXiv:astro-ph/9407062].
 10. “Future Cosmic Microwave Background Constraints to the Baryon Density,” Marc Kamionkowski, Gerard Jungman, Arthur Kosowsky, and David N. Spergel, in *Cosmic Abundances*, proceedings of the Conference, College Park, MD, October 9–11, 1995, edited by S. S. Holt and G. Sonneborn (ASP, San Francisco, 1996), p. 74–77 [arXiv:astro-ph/9601027].
 11. “Determining Cosmological Parameters from the Microwave Background,” Arthur Kosowsky, Marc Kamionkowski, Gerard Jungman, and David N. Spergel, in *Dark Matter in the Universe*, proceedings of the International Symposium on Sources and Detection of Dark Matter in the Universe, Santa Monica, CA, February 14–16, 1996, edited by D. B. Cline (North Holland, Amsterdam, 1996) [*Nuclear Physics B (Proc. Suppl.)* **51B**, 49–53 (1996)] [arXiv:astro-ph/9605147].
 12. “Do We Know the Geometry of the Universe?” Marc Kamionkowski and Nicolaos Toubas, in *Microwave Background Anisotropies*, proceedings of the 31st Moriond Astrophysics Meeting, Les Arcs, France, March 16–23, 1996, edited by F. R. Bouchet, R. Gispert, B. Guiderdoni, and J. Tran Thanh Van (Editions Frontieres, Gif-sur-Yvette, 1997), p. 221–226 [arXiv:astro-ph/9605100].
 13. “Particle Dark Matter,” Marc Kamionkowski, in *Neutrinos, Dark Matter, and the Universe*, proceedings of the VIIIth Rencontres de Blois, June 8–13, 1996, Blois, France, edited by T. Stolarczyk, J. Tran Thanh Van, and F. Vannucci (Editions Frontieres, Gif-sur-Yvette, 1997), p. 237–248 [arXiv:hep-ph/9609531].
 14. “WIMP and Axion Dark Matter,” Marc Kamionkowski, in *High Energy Physics and Cosmology*, proceedings of the 1997 Summer School, International Center for Theoretical Physics, Trieste, Italy, June 2–July 4, 1997, edited by E. Gava, A. Masiero, K. S. Narain, S. Randjbar-Daemi, G. Senjanovic, A. Smirnov, and Q. Shafi (World Scientific, Singapore, 1997) [arXiv:hep-ph/9710467].
 15. “Supersymmetric Dark Matter,” in *Heidelberg 1998, Dark matter in astrophysics and particle physics*, proceedings of the Second International Conference on Dark Matter in Astro and Particle Physics (DARK98) Heidelberg, Germany, July 20–25, 1998, edited by H. V. Klapdor-Kleingrothaus (IOP, Bristol, 1999), p. 461 [arXiv:hep-ph/9710467].
 16. “Cosmic Microwave Background Tests of Inflation,” Marc Kamionkowski, in *Topics in Astroparticle and Underground Physics ’97*, proceedings of the conference, Gran Sasso, Italy, September 7–11, 1997, edited by A. Bottino, A. di Credico, and P. Monacelli (North-Holland, Amsterdam, 1998) [*Nuclear Physics B (Proc. Suppl.)* **70**, 529] [arXiv:astro-ph/9712215].

17. “Cosmological-Parameter Determination With Cosmic Microwave Background Temperature Anisotropies and Polarization,” Marc Kamionkowski, in *Fundamental Parameters in Cosmology*, proceedings of the XXXIIIrd Rencontres de Moriond, Les Arcs, France, 17–24 January 1998, edited by J. Tran Thanh Van, Y. Giraud-Hereux, F. Bouchet, T. Damour, and Y. Mellier (Edition Frontiers, Paris, 1998) [arXiv:astro-ph/9803168].
18. “New Tests of Inflation,” Marc Kamionkowski, *Particles, Strings, and Cosmology (PAS-COS ’99)*, proceedings of the Sixth International Symposium, Boston, MA, March 22–29, 1998, edited by P. Nath (World Scientific, Singapore, 1999), p. 19–26. Also in *Heidelberg 1998, Dark matter in astrophysics and particle physics*, proceedings of the Second International Conference on Dark Matter in Astro and Particle Physics (DARK98) Heidelberg, Germany, July 20–25, 1998, edited by H.V. Klapdor-Kleingrothaus (IOP, Bristol, 1999), p. 131 [arXiv:astro-ph/9808004].
19. “Weak Lensing by Large-Scale Structure with the FIRST Radio Survey,” Alexandre Refregier, Scott T. Brown, Marc Kamionkowski et al., in “Wide Field Surveys in Cosmology,” proceedings of the XIVth IAP Meeting, Paris, France, May 26–30, 1998 (Editions Fontieres, Paris, 1998) [arXiv:astro-ph/9810025].
20. “Possible Relics from New Physics in the Early Universe: Inflation, The Cosmic Microwave Background, and Particle Dark Matter,” Marc Kamionkowski CU-TP-917, CAL-669, arXiv:astro-ph/9809320. To appear in *The Early and Future Universe*, proceedings of the CCAST Workshop, Beijing, China, June 22–27, 1998, edited by Minghan Ye (Gordon Breach, New York, 1998).
21. “The Cosmic Microwave Background: Beyond the Power Spectrum,” Marc Kamionkowski, in “Evolution of Large-Scale Structure: from Recombination to Garching,” proceedings of the MPA/ESO workshop, August 2–7, 1998, Garching, Germany, edited by A. J. Banday, R. K. Sheth, and L. N. da Costa (ESO, Garching, 1999) [arXiv:astro-ph/9809320].
22. “Indirect Detection of Neutralino Annihilation from Three-body Channels,” Xuelei Chen and Marc Kamionkowski, in “COSMO-98, (AIP Conference Proceedings, Vol 478)” proceedings of the workshop, November 15–20, 1998, Monterey, CA, edited by D. O. Caldwell (American Institute of Physics, Woodbury, 1999) [arXiv:hep-ph/9901435].
23. “Cosmic Microwave Background Observations in the Post-Planck Era,” J. B. Peterson et al., arXiv:astro-ph/9907276. Report of the NASA *Ad Hoc* Committee on Future Cosmic Microwave Background Missions.
24. “Supersymmetric Dark Matter,” Kim Griest and Marc Kamionkowski, in *David Schramm’s Universe*, edited by G. Brown, M. Kamionkowski, and M. S. Turner (North-Holland, Amsterdam, 2000), p. 167 [*Physic Reports* **333**].
25. “The Second Peak: The Dark-Energy Density and the Cosmic Microwave Background,” Marc Kamionkowski and Ari Buchalter, in “Sources and Detection of Dark Matter and Dark Energy in the Universe,” proceedings of the conference, February 23–25, 2000, Marina del Rey, CA, edited by D. B. Cline (Springer, Berlin, 2001), p. 119–127 [arXiv:astro-ph/0001045].
26. “Detection of Gravitational Waves from Inflation,” Marc Kamionkowski and Andrew H. Jaffe, in “DPF2000, the Meeting of the Division of Particles and Fields of the American Physical Society,” proceedings, Columbus, Ohio, August 9–12, 2000, edited by K. K. Gan

- and R. Kass (World Scientific, Singapore, 2001) [*Int. J. Mod. Phys. A* **16S1A**, 116–128 (2001)]; in “Gravitational Waves: A Challenge to Theoretical Astrophysics,” proceedings, Trieste, June 5–9, 2000, edited by V. Ferrari, J. C. Miller, and L. Rezzolla (ICTP, Trieste, 2001), p. 415–430; in the proceedings of Particles, Strings, and Cosmology 2001, Chapel Hill, NC, April 10–15, 2001, edited by P. Frampton and J. Ng (Rinton Press, Princeton, 2001), p. 23–36; and in “The Dark Universe: Matter, Energy, and Gravity,” proceedings of the symposium, Baltimore, MD, April 2–5, 2001 [arXiv:astro-ph/0011329].
27. “Particle Astrophysics and Cosmology: Cosmic Laboratories for New Physics (Summary of the Snowmass 2001 P4 Working Group),” Daniel S. Akerib, Sean M. Carroll, Marc Kamionkowski, and Steven Ritz, in “Snowmass 2001: The Future of Particle Physics,” edited by N. Graf, SLAC eConf **C010630**, P4001 (2002) [arXiv:hep-ph/0201178].
 28. “The Polatron: A Millimeter-Wave Cosmic Microwave Background Polarimeter for the OVRO 5.5 m Telescope,” B. J. Philhour, B. G. Keating, P. A. R. Ade, R. S. Bhatia, J. J. Bock, S. E. Church, J. Glenn, J. R. Hinderks, V. V. Hristov, W. C. Jones, M. Kamionkowski, D. E. Kumar, A. E. Lange, J. R. Leong, D. P. Marrone, B. S. Mason, P. V. Mason, M. M. Shuman, and G. I. Sirbi, astro-ph/0106543.
 29. “Inflation at the Edge,” Marc Kamionkowski, in “Galaxy Evolution: Theory and Observations,” proceedings of the conference, Cozumel, Mexico, April 8–12, 2002, edited by V. Avila-Reese, C. Firmani, C. Frenk, and C. Allen, *Revista Mexicana de Astronomia y Astrofisica* **17**, 1–8 (2003) [arXiv:astro-ph/0209273].
 30. “New Views of Cosmology and the Microworld,” Marc Kamionkowski, in “Secrets of the B meson,” proceedings of the XXXth SLAC Summer Institute, August 5–16, 2002 (SSI02), edited by J. Hewett, J. Jaros, T. Kamae, and C. Prescott, eConf **C020805**, TF04 (2002) [arXiv:hep-ph/0210370].
 31. “Cosmology and Dark Matter,” Marc Kamionkowski, in proceedings of ICHEP02, 31st International Conference on High Energy Physics, Amsterdam, July 24–31, 2002, [*Nuclear Physics B* **117**, 335–352 (2003)].
 32. “Theory of Cosmic Microwave Background Polarization,” Paolo Cabella and Marc Kamionkowski, arXiv:astro-ph/0403392. Lectures given at the 2003 Villa Mondragone School of Gravitation and Cosmology: “The Polarization of the Cosmic Microwave Background,” Rome, Italy, September 6–11, 2003 and at the 9th Paris Cosmology Colloquium, “Physics of the Early Universe Confronts Observations,” June 30–July 2, 2005. To appear in the proceedings of the latter conference.
 33. “Generalized analysis of WIMP Searches,” Marc Kamionkowski and Andriy Kurylov, in “Sources and Detection of Dark Matter and Dark Energy in the Universe,” proceedings of the conference, Marina del Rey, CA, February 18–20, edited by D. B. Cline [*New Astronomy Reviews* **49**, 241–244 (2005)].
 34. “Thermal Axion Constraints in Non-standard Thermal Histories,” Daniel Grin, Tristan S. Smith, and Marc Kamionkowski, AIP Conf. Proc. **1274**, 78 (2010) [arXiv:0812.4721 [astro-ph]].
 35. Savvas M. Koushiappas and Marc Kamionkowski, “Energetic neutrinos from the Sun and Earth and Dark Matter Substructure,” arXiv:0912.1573. To appear in the AIP Proceedings of the CCAPP Symposium, Columbus, Ohio, October 11–14, 2009.

36. Annika H. G. Peter, Christopher E. Moody, Andrew J. Benson, and Marc Kamionkowski, “Constraints on Decaying Dark Matter,” in the proceedings of the 8th International Workshop on the Identification of Dark Matter, Montpellier (France, 26-40 July 2010), p. 84 (2011). [arXiv:1011.4970 [astro-ph.CO]].

Books:

1. *David Schramm’s Universe*, edited by Gerry Brown, Marc Kamionkowski, and Michael S. Turner (North-Holland, Amsterdam, 2000) [*Physics Reports* **333**].
2. *GGI–Dark Matter and Dark Energy 2009, new horizons for modern cosmology*, proceedings of the Galileo Galilei Institute Conferences on Dark Matter and Dark Energy, Florence, Italy, 19th January – 13th March 2009, “New Horizons For Modern Cosmology,” 19 January–13 March 2009, Arcetri, Florence, Italy, edited by M. Kamionkowski, C. Martins, A. Melchiorri, A. Polosa and L. Verde.

Popular articles, Comments, and Book Reviews:

1. “The Case of the Curved Universe: Open, Closed, or Flat,” Marc Kamionkowski, *Science* **280**, 1397–1398 (1998) [arXiv:astro-ph/9806347].
2. “New Troubles for Inflation?” Marc Kamionkowski and Andrew Jaffe, *Nature* **395**, 639–641 (1998).
3. “Gravitational Echoes from the Big Bang,” Robert R. Caldwell and Marc Kamionkowski, *Scientific American* January 2001, 38–43 (2001). Updated and reprinted in a “The Once and Future Cosmos,” a special edition of *Scientific American*, October 2002.
4. “A New Window to the Early Universe,” Eric Hivon and Marc Kamionkowski, *Science* **298**, 1349–1350 (2002) [arXiv:astro-ph/0211553].
5. “Weird notions that drive science” (review of *Strange Matters: Undiscovered Ideas at the Frontiers of Space and Time* by Tom Siegfried), Marc Kamionkowski, *Nature* **420**, 362–363 (2002).
6. “A Hawking-Eye View of the Universe,” review of Stephen Hawking’s *The Universe in a Nutshell*, Marc Kamionkowski, *Science* **296**, 267 (2002).
7. “Dark Matter and Dark Energy,” Robert Caldwell and Marc Kamionkowski, *Nature* **458**, 587–589 (2009).
8. “Gravity Ripples Chased,” Marc Kamionkowski, *Nature* **460**, 964–965 (2009).
9. “Viewpoint: Is the Lopsided Universe an Open Universe?” *Physics* **6**, 98 (2013).
10. “Commentary: BICEP2’s B modes: Big Bang or Dust?” Mario Livio and Marc Kamionkowski, *Physics Today* **67**, 8 (2014).

Popular Talks and Public Outreach:

1. Panelist for “Origins of the Universe,” a Bard Center Panel Discussion, New York City, April 24, 1998.
2. “Cosmology and Astrophysics,” invited talk at the Jack R. Howard Science Reporting Institute (for journalists), Caltech, August 18, 2000.
3. “Birth of the Universe,” Caltech Seminar Day (popular talk for Caltech alumni), May 19, 2001.

4. “Birth of the Universe,” invited talk at the Jack R. Howard Science Reporting Institute (for journalists), Caltech, June 29, 2001.
5. “Birth of the Universe,” LIGO popular talk, Richland, WA, August 12, 2001.
6. “What’s New in Cosmology? An Update for Members of the Legal Profession,” lunch talk at the law firm of Munger, Tolles, and Olson, Los Angeles, CA, August 27, 2001.
7. “Weird Gravity?” An Update for Members of the Legal Profession,” lunch talk at the law firm of Munger, Tolles, and Olson, Los Angeles, CA, April 14, 2003.
8. “Weird Gravity: Phantom Energy and the Big Rip,” talk for the Southern California Association of Physics Teachers, October 25, 2003.
9. “Apocalypse: The Big Rip,” talk at Categorically Not!, Santa Monica, CA, September 24, 2006.
10. “The Big Rip: A New Fate for the Universe?” IUCAA, Pune, India, July 31, 2008.
11. “Dark Matter and the Equivalence Principle,” lunch talk at the law firm of Munger, Tolles, and Olson, Los Angeles, CA, May 16, 2011.
12. “Dark Matter, the Equivalence Principle, and the Sagittarius Dwarf Galaxy,” talk at Quarknet 2012, Johns Hopkins University, August 2, 2012.
13. Interviewed for Euronews TV special, “Planck Maps the Dawn of Time,” released 21 March 2013.
14. Distinguished Outside Expert for NASA’s news teleconference on Planck cosmology findings, 21 March 2013.
15. Guest on Kathleen Dunn show, Wisconsin Public Radio, 30 April 2013.
16. Interviewed for Aspen Physics Previews, Grassroots TV, Aspen, CO, 14 Aug 2013.
17. “Beauty and Blemishes in the Universe,” Aspen Center for Physics public lecture, 22 Aug 2013, Aspen, CO.
18. Distinguished Outside Expert for Harvard-Smithsonian Center for Astrophysics press conference announcing new results from the BICEP2 collaboration, 17 March 2014.
19. “Unraveling the Early Universe with the Cosmic Microwave Background,” talk at Quarknet 2014, Johns Hopkins University, July 30, 2014.
20. Interviewed about inflation for Russian TV channel LIFENEWS, 22 August 2014.
21. Interviewed for NHK Japan TV documentary series, “Cosmic Front,” episode to be aired 27 November 2014.
22. “A Telegram from the Early Universe?” invited talk at *New Horizons in Science*, sponsored by the Council for the Advancement of Science Writing, Columbus, OH, 20 October 2014.
23. “A Telegram from the Early Universe?” public lecture at the Space Telescope Science Institute, 11 November 2014.
24. “Dark matter and the equivalence principle,” a discussion for physics students at Shaker Heights High School, 14 November 2014.
25. “A Telegram from the Early Universe?” public lecture at the Cleveland Museum of Natural History, 14 November 2014.

26. “A Telegram from the Early Universe?” public lecture at the Origins Institute, McMaster University, Hamilton, Ontario, 2 December 2014.
27. “Secrets from the Early Universe,” interview on *StarSpot* podcast, 19 April 2015.

Selected Media Coverage:

1. “Will the Universe End in a Big Rip,” *NBC News Today* article on the Big Rip, 4 March 2003.
2. “Universal Migraine,” *Los Angeles Times* editorial on the Big Rip, 29 March 2003.
3. “No Extra Gravity for Dark Matter,” *Science Magazine* article on work on the equivalence principle, 3 October 2006.
4. “From Space, a New View of Doomsday,” *New York Times* article on the Big Rip, 17 February 2004.
5. “Hints of Structure Beyond the Visible Universe,” *New Scientist* article on work on the power asymmetry, 10 June 2008.
6. “New Theories May Shed Light on Dark Matter,” *Scientific American* article on work on dark matter and dark radiation, 10 November 2008.
7. “How to Survive the End of the Universe,” *Discover* magazine article on the Big Rip, December 2011.
9. Quoted in major news sources around the world following the 21 March 2013 announcement of results from the Planck Satellite.
10. “In Lopsided Map of the Universe, a Glimmer of Its Origins,” *Quanta Magazine* article on work on power asymmetry (reprinted in *wired.com*), 14 June 2013.
11. Quoted in major news sources around the world following the 17 March 2014 announcement from BICEP2. This includes the *New York Times* Quotation of the Day 18 March 2014 and quotation on “Wait Wait Don’t Tell Me,” the NPR news quiz show, 22 March 2014.
12. “Stringy fields may make the Universe swell faster,” *New Scientist* article on work on dark energy, 12 September 2014.
13. Quoted in *Scientific American* article, “Not all gravitational waves are created equal,” 14 January 2016.
14. Quoted in *Science Magazine* article, “Woohoo! email stokes rumor that gravitational waves have been detected,” 5 February 2016.