

Curriculum Vitae of Hiranya V. Peiris

Research Interests

Theoretical and observational cosmology; cosmic microwave background; large scale structure; early universe theoretical physics; stellar dynamics; galaxy evolution; statistical methods; optimal numerical algorithms.

Academic Record

- Nov 2003: Doctor of Philosophy: Astrophysics, **Princeton University**
Title: “*WMAP First Year Results: Cosmological Parameters and Implications for Inflation*”
Advisor: Prof. David N. Spergel
- Jun 2001: Master of Arts in Physics, **Princeton University**
- Jun 2000: Master of Arts in Astrophysics, **Princeton University**
- 1994-1998: Bachelor of Arts and Master of Science in Natural Sciences (Physics)
1st Class Honours, **University of Cambridge**

Research Record

- Oct 09 - present: University Lecturer, Dept. of Physics and Astronomy, **University College London**
- Oct 09 - Sep 12: STFC Advanced Fellowship, held at **University College London**
- Oct 08 - Sep 09: Junior Research Fellowship, **King's College, Cambridge**
- Oct 07 - Sep 09: STFC Advanced Fellowship, held at Institute of Astronomy, **Cambridge University**
- Oct 04 - Sep 07: Hubble Postdoctoral Fellowship (NASA/STSci), held at the **University of Chicago**
- Oct 04 - Sep 07: Enrico Fermi Fellowship, Enrico Fermi Institute, **University of Chicago**
- Nov 03 - Sep 04: Research Associate, Dept. of Astrophysical Sciences, **Princeton University**
- Summer 1997: Summer Undergraduate Research Fellow, *Galileo* Orbiter Science Team, **JPL/Caltech**
- Summer 1996: Summer Undergraduate Research Fellow, *Galileo* Orbiter Science Team, **JPL/Caltech**

Professional Esteem Indicators

Over **100** invited presentations, including seminars, colloquia, and international conferences
Citation count: **19667** (Astrophysics Data System); **45** refereed publications; **3** invited review articles
ADS Hirsch h-factor: **28**; Hirsch m-factor gradient: **3.3**
Organizer/session convenor at **eight** international symposia

Prizes, Awards, and Competitive Fellowships

Post-PhD

- 2012: Fowler Prize, Royal Astronomical Society, U.K.
- 2009: Philip Leverhulme Prize, The Leverhulme Trust, U.K.
- 2008: Junior Research Fellowship, King's College, Cambridge
- 2007: STFC Advanced Fellowship, UK Science and Technology Facilities Council
- 2007: Halliday Prize, given to the top scientist selected for STFC Advanced Fellowship
- 2007: Kavli Frontiers Fellow, US National Academy of Science (of 76 named in all fields in 2007)
- 2004 & 2007: 2 Group Achievement Awards to WMAP Science Team awarded by NASA
- 2004: Hubble Postdoctoral Fellowship (NASA/STSci), held at University of Chicago
- 2004: Enrico Fermi Fellowship, Enrico Fermi Institute, University of Chicago, U.S.A.
- 2004: Miller Research Fellowship, U.C. Berkeley, U.S.A. (declined)
- 2004: David N. Schramm Fellowship, Fermi National Accelerator Laboratory, U.S.A. (declined)

Pre-PhD

- 2002: Harold W. Dodds Honorific Fellowship, Princeton University, U.S.A.
- 1998: Merit Fellowship in Natural Sciences and Mathematics, Princeton University, U.S.A.
- 1998: Poesner Scholar of New Hall, University of Cambridge
- 1997: Summer Undergraduate Research Fellowship, California Institute of Technology, U.S.A.
- 1996: Summer Undergraduate Research Fellowship, California Institute of Technology, U.S.A.

Professional Affiliations and Service

- Societies: Royal Astronomical Society, American Astronomical Society, Institute of Physics (UK)
- Projects: Member, Wilkinson Microwave Anisotropy Probe Science Team (2002-2006)
Member, CMBPol Mission Concept Study (2008-2009)
Member, Planck High Frequency Instrument Core Team (2009-)
Coordinator, joint CMB studies working group, Herschel-SPIRE Legacy Survey Study
Member, science working group, Cosmic Origins Explorer (COre) Mission Proposal
- Referee: Monthly Notices of the Royal Astronomical Society, Physical Review Letters, Physical Review D, Journal of Cosmology and Astroparticle Physics, Science, General Relativity and Gravitation, Classical and Quantum Gravity
- Reviewer: Canadian Space Agency Small Missions in Space Science, 2007
Science & Technology Facilities Council Astronomy Theory Standard Grants, 2008
Science & Technology Facilities Council Advanced Fellowships, 2008, 2011
L'Agence Nationale de la Recherche (ANR), France, Blanc SIMI 5, 2010
Science & Technology Facilities Council Consolidated Grants, 2012

Teaching

Departmental teaching

- Lecturer, PHASM336, Advanced Physical Cosmology (UCL, 4th year / Masters level course) 2010-
- Completed UCL Postgraduate Certificate in Learning and Teaching in Higher Education, Module A (2011)
- Lecturer, PHAS3136 Cosmology & Extragalactic Astronomy (UCL, 3rd year course) 2009-2010
- Lecturer, Part III Maths Cosmology (DAMTP, Cambridge) 2008-2009
- Teaching Assistant for AST 203: *The Universe*, Princeton University, Spring 1999

Project students

- UCL: [2010-2011] Liyan Xu, [2009-10] Simon Hall, Niall Gibson
- Cambridge: [2008-09] Matt Anderson, [2007-08] Arianne Shahvisi

Other

- Lecturer, ERC training course on numerical methods in early universe cosmology, ICC, University of Barcelona, Spain (Jun 2011)
- Faculty, Perimeter Scholars International, Perimeter Institute, Waterloo, Canada (Dec 2009)
- Lecturer, UniverseNet Cosmology Summer School, Oxford, U.K. (Sept 2008)
- Lecturer, Summer School "Cosmology with CMB and LSS", ICTS-IUCAA, Pune, India (Aug 2008)
- Lecturer, JEDI 2 Workshop on Creativity and Research, UCT, South Africa (Jul 2008)

Research Student Supervision¹ (10 postgraduates, 2 undergraduates)

As primary supervisor on a research project

- Tristan Smith (Graduate, CalTech) 2006, 1 journal paper [Fellow, U.C. Berkeley]
- Cora Dvorkin (Graduate, U. Chicago) 2006-2009, 3 journal papers [Fellow, IAS Princeton]
- Daniel Baumann (Graduate, Princeton) 2007, 1 journal paper [Fellow, IAS Princeton]
- Brett Friedman (Undergraduate, U.C. Irvine) 2007, 1 journal paper
- Jean-Rene Gauthier (Graduate, U. Chicago) 2007-2008 [Fellow, CalTech]
- Jiajun Xu (Graduate, Cornell University) 2007-2008, 1 journal paper [Fellow, Wisconsin-Madison]
- Michael Mortonson (Graduate, U. Chicago) 2008-2009, 1 journal paper [Fellow, Ohio State]
- Andrew Pontzen (Graduate, Cambridge) 2008-2009, 2 journal papers [Fellow, Cambridge University]

As PhD/Research Masters supervisor

- Simeon Bird (Graduate, Cambridge) 2007-2011, 3 journal papers [Fellow, IAS Princeton]
- Anjali Tripathi (Undergraduate/Marshall Scholar, Cambridge) (2009-2010) [PhD, Harvard University]
- Stephen Feeney (Graduate, University College London) 2009-, 5 journal papers
- Boris Leistedt (Graduate, University College London) 2011-

¹ First position after graduation shown in square brackets for students that remained in academia.

Grants

Current Grants

- Apr 2012: "UCL Astrophysics Consolidated Grant 2012-2015" ST/J001511/1, Science and Technology Facilities Council, U.K. (Co-I/ £1.872M; PI: Lahav, 17 other Co-Is)
- Sep 2011: "Newton International Fellowship", Royal Society (UK PI/ £66,000, International PI: McEwen)
- Aug 2011: FQXi Mini Grant for travel, Foundational Questions Institute (PI / US\$5,000)
- Feb 2011: "Cosmology from Surveys" UCL cosmology group grant, ST/I000879/1, Science and Technology Facilities Council (Co-I/ £468,086; PI: Lahav, 2 other Co-Is)
- Jan 2011: "Detecting signatures of eternal inflation using WMAP and Planck data", FQXi Large Grant, Foundational Questions Institute (PI / US\$112,331, 1 Co-I)
- Nov 2010: Philip Leverhulme Prize, The Leverhulme Trust (PI/£70,000)
- Sep 2010: "Support for an International Meeting", Royal Astronomical Society (PI/£2,000)
- Oct 2007: Halliday Prize, Science and Technology Facilities Council (PI / £50,000, 0 Co-Is)
- Oct 2007: "Cosmic Acceleration: Connecting Theory and Observation", STFC Advanced Fellowship E004121, Science and Technology Facilities Council (PI / £502,956, 0 Co-Is)

Past Grants

- Apr 2009: "Research in Theoretical Astronomy, 2009-14", IoA Theory Rolling Grant, Science and Technology Facilities Council, U.K. (Co-I/ £2.439M; PI: Efstathiou, 12 other Co-Is)
- Oct 2007: "Cosmic Acceleration", Marie Curie International Reintegration Grant IRG-203314, European Commission (PI / €100,000, 0 Co-Is)
- Oct 2004: "Constraining Fundamental Physics with CMB and Complementary Data", Hubble Fellowship, HF-01177.01-A, NASA/ST.Sci. (PI / US\$275,248, 0 Co-Is)
- Feb 2004: "Analysis of WMAP Data", Astrophysics Data Program NNG04GC88G, NASA (Co-I, US\$133,935; PI: Verde, 0 other Co-Is)

Organization of International Conferences

- Co-organizer, *Unsolved Problems in Astrophysics & Cosmology*, Benasque Center for Physics, Feb 2011
- Session Convenor, International Conference for High Energy Physics (ICHEP2010), Paris, Jul 2010
- Co-organizer, *Fingerprints of the Very Early Universe*, Aspen Center for Physics, May-Jun 2009
- Session Chair, Dark Energy Conference, Galileo Galilei Institute, Florence, Mar 2009
- Co-organizer, *Snowdon Problems in Modern Cosmology* Workshop, Aug 2008
- Session Chair, *Cosmic Microwave Radiation* conference, Aspen Center for Physics, Jan 2008
- Cosmology Session Convenor, 13th PASCOS International Symposium, London, Jul 2007
- Co-organizer, *Life Beyond the Gaussian* Workshop at the KICP, U. Chicago, Jun 2006

Departmental Service

UCL

- Ph.D. viva examiner, Manda Banerji (Sep 2009)
- M.Phil transfer interview, Adam Hawken (May 2010)
- PhD first year interview, Fotini Economou (Sept 2010)
- M.Phil transfer interview, Emily Hall (Nov 2010)
- M.Phil transfer interview, Fotini Economou (July 2011)
- PhD final year interview, Adam Hawken (July 2011)
- Organizer, Cosmology Journal Club, University College London, 2009–
- Organizer, UCL Astrophysics Colloquium series, UCL, 2009–2011
- Organizer, London Cosmology Discussion Meetings (LCDM), 2010–

Institute of Astronomy, Cambridge

- Member, Graduate Admissions Committee (2007–2009)
- Academic staff appraiser (2008-2009)
- Organizer, Cosmology Journal Club, Institute of Astronomy (2007–2009)
- Postgraduate Penultimate Year interview, Luke Barnes (Jun 2008)
- Certificate of Postgraduate Studies examination, Eliu Huerta (Aug 2008)
- Postgraduate Penultimate Year interview, Samira Hammimeche (Nov 2008)

Departmental Service (contd.)

University of Chicago

- Organizer, Kavli Institute for Cosmological Physics Seminar Series, U. Chicago, 2006–2007

Invited Scientific Presentations (selected)

I have given over 100 invited talks (including all the major annual international symposia relevant to my area of expertise). Multidisciplinary international meetings are indicated by (*). Full listing at the end of the CV.

- Jul 2011: Invited talk, Early Universe Cosmology International Symposium, Perimeter Institute, Canada
May 2011: Plenary talk, Far-IR and Sub-mm International Workshop, Irvine, California
Dec 2010: Plenary talk, International Symposium on Non-Gaussianities, Allahabad, India
Jun 2010: Plenary talk, Joint UCL-Weizmann Institute Symposium, London, U.K.
Dec 2009: Joint Harvard/MIT/Tufts Cosmology Colloquium, Harvard University, U.S.A.
*Oct 2009: Plenary talk, “Statistical Frontier of Astrophysics”, IPMU Tokyo, Japan
Sep 2009: Plenary talk, 9th COSMO International Symposium, CERN, Switzerland
*Dec 2008: Invited talk, XXIV Texas Symposium on Relativistic Astrophysics, Vancouver, Canada
Aug 2008: Plenary talk, Early Universe workshop, IUCAA, Pune, India
Jun 2008: Invited talk, CMB Polarization Workshop: Theory and Foregrounds, Fermilab, U.S.A.
Apr 2008: Invited talk, PONT d'Avignon 2008 International Cosmology Meeting, Avignon, France
Jan 2008: Invited talk, “Cosmic Microwave Radiation”, Aspen Center for Physics, U.S.A.
*Oct 2007: Invited talk, US National Academy of Sciences Kavli “Frontiers of Science” Symposium
May 2007: Plenary talk, Rencontres de Blois 2007 International Symposium, Blois, France
Jun 2006: Plenary talk, “Inflation+25” International Conference, Paris, France
Dec 2005: Invited talk, KICP Inaugural Symposium: “New Views of the Universe”, Chicago, U.S.A.
Jun 2005: Invited talk, 9th Paris Cosmology Colloquium, Ecole Internationale Daniel Chalonge
*Apr 2005: Invited talk, 2005 American Physical Society Meeting, Tampa, FL, U.S.A.
Apr 2005/2006/2007: Invited talk, Hubble Fellows Symposium, Space Telescope Science Institute, U.S.A.
*Dec 2004: Plenary talk, String Cosmology Workshop, National Taiwan Normal University, Taipei
Dec 2004: Invited talk, 8th Paris Cosmology Colloquium, Ecole Internationale Daniel Chalonge
*Jun 2004: Plenary talk, 10th Annual German-American Frontiers of Science Symposium, Germany
*Feb 2004: Invited talk, Winter Conference on Particle Physics, Aspen Center for Physics, U.S.A.
Nov 2003: Keynote talk, 6th RESCEU International Symposium, Tokyo, Japan
Mar 2003: Keynote talk, Royal Astronomical Society Meeting on
“Cosmic Microwave Background and Fundamental Physics”, London, U.K.

Public Outreach

I have provided comments / short articles / reviews for: *Astronomy Magazine*, *Nature*, *Discover*, *New Scientist*, *The Observatory*.

- UCL Science Centre Lecture to several hundred 6th Formers and Teachers (March 2012)
- Invited speaker, Cambridge Scientific Society (Feb 2012)
- Guest on the Big Science FM radio show and podcast (Sep 2011)
- Invited speaker, Society for Popular Astronomy, U.K. (Jul 2011)
- University of Manchester “Jodcast” (Nov 2010)
- Opinion piece for the *New Scientist*: “Cosmology's not broken, so why try to fix it?”
- Featured scientist on Guardian Science Weekly podcast (Jul 2010)
- Talk to MPs and policymakers, RCUK event “Impacts: people and skills” (Jun 2010)
- Interview and researcher profile for Research Councils UK “Impacts” publication (Apr 2010)
- Cambridge Astronomical Association talk (Aug 2009)
- Aspen Center for Physics Dialogue (Nov 2008)
- Astronomer portrait for “Explorers of the Universe” exhibition, Royal Albert Hall [STFC-funded project for International Year of Astronomy 2009, Max Alexander] (Nov 2008)
- Speaker, South Hampstead High School Careers Conference (Jun 2008)
- Interview for Slacker Astronomy monthly podcast (May 2007)
- 90 min Workshop for Great Lakes Planetarium Association (Oct 2006)

Public Outreach (contd.)

- Featured scientist in “Beyond the Solar System” DVD, NASA Universe Education Forum / Harvard-Smithsonian Center for Astrophysics (2005)
- CSLP Class Presentation, Old Bridge High School, NJ, U.S.A. (May 2004)
- Invited Lecture for Amateur Astronomers Association of New York City (Mar 2004)
- Organizer, Princeton Observatory Weekly Public Star-watch (2000-2001)

Referees

Prof. David Spergel

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E-mail: gpe@ast.cam.ac.uk

Phone: +44-(1223) 337530

Fax: +44-(1223) 337523

Scientific Presentations² (full list)

- Feb 2012: “First observational tests of Eternal Inflation”, Cosmology Seminar, University of Sussex, U.K.
- Jan 2012: “First observational tests of Eternal Inflation”, HEP/Astrophysics Colloquium, RWTH Aachen, Germany
- Dec 2011: “Challenges of the Early Universe”, 5th Austria-France-Italy symposium: *Clues to a Mysterious Universe*, Innsbruck, Austria
- Nov 2011: “First observational tests of Eternal Inflation”, Colloquium, Laboratoire AstroParticule et Cosmologie, Paris, France
- Nov 2011: “First observational tests of Eternal Inflation”, Cambridge Cosmology Lunch, DAMTP, University of Cambridge, U.K.
- Nov 2011: “First observational tests of Eternal Inflation”, Astro/particle seminar, Weizmann Institute, Israel
- Nov 2011: “The physics of the CMB”, Pedagogical seminar to the High Energy Physics group, Weizmann Institute, Israel
- Oct 2011: “First observational tests of Eternal Inflation” Joint ICTP/SISSA Colloquium, Trieste, Italy
- Sept 2011: “First observational tests of Eternal Inflation”, Astrophysics Seminar, Mullard Space Science Laboratory, University College London, U.K.
- Aug 2011: “First observational tests of Eternal Inflation”, *Current and Future Challenges of the Dark and Early Universes* international workshop, Copenhagen University, Denmark
- July 2011: “First observational tests of Eternal Inflation”, *String Theory and Precision Cosmology* international workshop, Cornell University, U.S.A.
- July 2011: “First observational tests of Eternal Inflation”, *Challenges for Early Universe Cosmology* international workshop, Perimeter Institute, Canada
- June 2011: “Exploring the origin and evolution of structure in the universe”, ICC Colloquium, University of Barcelona, Spain
- May 2011: “Cosmology at sub-mm wavelengths: Overview”, *Unveiling the Far-IR and Sub-mm Extragalactic Universe* international workshop, Irvine, California, U.S.A.
- Apr 2011: “First observational tests of Eternal Inflation”, *Bubbles in the Sky* international workshop, UC Davis, California, U.S.A.
- Mar 2011: “First observational tests of Eternal Inflation”, String Theory Seminar, University of Amsterdam, The Netherlands
- Dec 2010: “First observational tests of Eternal Inflation”, *Primordial Features and Non-Gaussianities 2010* international workshop, Allahabad, India
- Nov 2010: “Fingerprints of the Early Universe”, JBCA Astrophysics Colloquium, University of Manchester, U.K.
- Nov 2010: “Fingerprints of the Early Universe”, Royal Astronomical Society Ordinary Meeting, London, U.K.
- Sept 2010: “Fingerprints of the Early Universe”, *New Directions in Modern Cosmology* Workshop, Lorentz Center, Leiden, The Netherlands
- Aug 2010: “Fingerprints of the Early Universe”, UniverseNet Cosmology Workshop, Niels Bohr Institute, Copenhagen, Denmark
- June 2010: “Fingerprints of the Early Universe”, *From Planets to Galaxies 2010*, Eotvos Astrophysics Workshop, Budapest, Hungary
- June 2010: “Fingerprints of the Early Universe”, Plenary talk, *Cosmic Enigma* Joint UCL-Weizmann Institute Symposium, London, U.K.
- June 2010: “Fingerprints of the Early Universe”, cosmology seminar, Imperial College, U.K.
- May 2010: “Fingerprints of the Early Universe”, Institute for Astronomy seminar, Edinburgh, U.K.
- May 2010: “Fingerprints of the Early Universe”, ICC seminar, University of Durham, U.K.
- May 2010: “Fingerprints of the Early Universe”, CosmoVIA virtual lecture, <http://cosmovia.org>
- April 2010: “Fingerprints of the Early Universe”, Astronomy Group Seminar, University of Nottingham, U.K.
- Mar 2010: “Fingerprints of the Early Universe”, Institute of Physics in Ireland Spring Weekend, Ireland
- Mar 2010: “Fingerprints of the Early Universe”, Astrophysics Colloquium, Oxford University, U.K.
- Dec 2009: “The nature of primordial fluctuations: Concordance or Discordance?”, Joint Harvard/MIT/Tufts Cosmology Colloquium, Harvard University, U.S.A.
- Oct 2009: “Fingerprints of the Early Universe”, 3rd Austria-France-Italy symposium: *Fundamental Physics Questions*, Innsbruck, Austria

² All are invited talks unless denoted “contributed talk”.

- Oct 2009: "The critical role of statistics in Cosmic Microwave Background studies", Plenary talk for *Statistical Frontier of Astrophysics*, IPMU Tokyo, Japan
- Sept 2009: "Prospects for CMB observations", plenary talk for *COSMO09*, CERN, Switzerland
- May 2009: "Polarization Tests of CMB Temperature Anomalies: A Last Stand Before Planck!", ICG Seminar, University of Portsmouth, U.K.
- May 2009: "Polarization Tests of CMB Temperature Anomalies: A Last Stand Before Planck!", Cosmology Seminar, Imperial College London, U.K.
- Apr 2009: "Polarization Tests of CMB Temperature Anomalies: A Last Stand Before Planck!", Cambridge Cosmology Lunch, DAMTP, University of Cambridge, U.K.
- Apr 2009: "Fingerprints of the Early Universe", Colloquium, Laboratoire AstroParticule et Cosmologie, Paris, France
- Mar 2009: "Polarization Tests of CMB Temperature Anomalies: A Last Stand Before Planck!" Gravity and Particles Seminar, University of Nottingham, U.K.
- Dec 2008: "Primordial Black Holes, Eternal Inflation, and the Inflationary Parameter Space After WMAP5" XXIV Texas Symposium on Relativistic Astrophysics, Vancouver, Canada
- Dec 2008: "Fingerprints of the Early Universe", Cosmology seminar, Perimeter Institute, Canada
- Aug 2008: "Fingerprints of the Early Universe", *Link to Early Universe* workshop, IUCAA, Pune, India
- July 2008: "Fingerprints of the Early Universe", JEDI 2 Workshop, University of Cape Town, South Africa
- Jun 2008: "Testing Inflation with CMBPOL", CMB Polarization Workshop: *Theory and Foregrounds*, Fermilab, U.S.A.
- May 2008: "Observing Brane Inflation", Theoretical Physics Colloquium, Utrecht University, The Netherlands
- May 2008: "Primordial Black Holes, Eternal Inflation, and the Inflationary Parameter Space After WMAP5", Cambridge Cosmology Lunch, DAMTP, University of Cambridge, U.K.
- May 2008: "Observing String Inflation", Astronomy Seminar, Queen Mary London, U.K.
- Apr 2008: "Review of WMAP 5 year Results", *PONT d'Avignon 2008* International Cosmology Meeting, Avignon, France
- Mar 2008: "Observing String Inflation", Astrophysics Seminar, University of Sussex, U.K.
- Jan 2008: "Observing String Inflation", *Cosmic Microwave Radiation* Conference, Aspen Center for Physics, U.S.A.
- Nov 2007: "Observing String Inflation", BIPAC Seminar, Oxford University, U.K.
- Nov 2007: "Observing String Inflation", Cambridge Cosmology Lunch, DAMTP, University of Cambridge, U.K.
- Oct 2007: Invited Fellow, US National Academy of Sciences Kavli *Frontiers of Science* Symposium, U.S.A.
- Oct 2007: "Observing String Inflation", High Energy Theory Seminar, Imperial College, London, U.K.
- Oct 2007: "Primordial Gravitational Waves from String Inflation?" Wednesday Astrophysics Seminar, Institute of Astronomy, University of Cambridge, U.K.
- July 2007: "Phenomenology of D-Brane Inflation with General Speed of Sound" (contributed talk) 13th International Symposium on Particles, Strings and Cosmology, Imperial College, London, U.K.
- May 2007: "WMAP and Constraints on Dark Matter and Dark Energy" Plenary Speaker, *Rencontres de Blois 2007*, France
- May 2007: "Understanding Cosmic Acceleration: Connecting Theory and Observation" Astronomy seminar, Northwestern University, U.S.A.
- Apr 2007: "Understanding Cosmic Acceleration: Connecting Theory and Observation" Astronomy Colloquium, Ohio State University, U.S.A.
- Apr 2007: "Dynamical Behavior of Generic Dark Energy Models" Hubble Fellows Symposium, Space Telescope Science Institute, U.S.A.
- Feb 2007: "Understanding Cosmic Acceleration: Connecting Theory and Observation" Special seminar, Columbia University, U.S.A.
- Feb 2007: "Understanding Cosmic Acceleration: Connecting Theory and Observation" Astronomy Colloquium, UC Los Angeles, U.S.A.
- Feb 2007: "Understanding Cosmic Acceleration: Connecting Theory and Observation" TAC Seminar, UC Berkeley, U.S.A.
- Jan 2007: "Understanding Cosmic Acceleration: Connecting Theory and Observation" Physics Astronomy joint special seminar, Pennsylvania State University, U.S.A.
- Jan 2007: "Understanding Cosmic Acceleration: Connecting Theory and Observation" HEP/Astrophysics Seminar, University of Michigan, U.S.A.
- Dec 2006: "Inflation after 3 years of WMAP" (contributed talk) XXIII Texas Symposium on Relativistic

Astrophysics, Melbourne, Australia

- Aug 2006: "Inflation after 3 years of WMAP", Benasque Cosmology Workshop, Spain
- July 2006: "Inflation after 3 years of WMAP", Astrophysics Seminar, University of Sussex, U.K.
- June 2006: "Inflation after 3 years of WMAP", plenary speaker, "Inflation+25" Conference, Paris
- May 2006: "Inflation after 3 years of WMAP", Michigan Inflation Workshop, U.S.A.
- May 2006: "Inflation after 3 years of WMAP" Wednesday Astrophysics Seminar, Institute of Astronomy, Cambridge, U.K.
- May 2006: "Inflation after WMAP 3" Astrophysics Group Seminar, University College London, U.K.
- Apr 2006: "Inflation after 3 years of WMAP" Hubble Fellows Symposium, Space Telescope Science Institute, U.S.A.
- Mar 2006: "Inflation after WMAP II", Space Telescope Science Institute Colloquium, U.S.A.
- Mar 2006: "Inflation after WMAP II", U.C. Irvine CMB Workshop, U.S.A.
- Dec 2005: "Parameter Estimation, Slow Roll and the Inflationary Potential" KICP Inaugural Symposium: *New Views of the Universe*, Chicago, U.S.A.
- Jul 2005: "Revisiting High-velocity White Dwarfs with the SDSS" (contributed talk) LG2005: *Mass and Mystery in the Local Group*, Institute of Astronomy, Cambridge, U.K.
- Jul 2005: "Optimizing CMB Polarization Experiments to Constrain Inflationary Physics" Wednesday Astrophysics Seminar, Institute of Astronomy, Cambridge, U.K.
- Jun 2005: "Optimizing CMB Polarization Experiments to Constrain Inflationary Physics" 9th Paris Cosmology Colloquium, Ecole Internationale Daniel Chalonge, Paris, France
- May 2005: "Can Cosmology Test Stringy Physics?" Astrophysics and Cosmology Seminar, University of Wisconsin, Madison, U.S.A.
- Apr 2005: "Constraining Early Universe Physics using Cosmology: Present and Future" Special Physics Seminar, Harvard University, U.S.A.
- Apr 2005: "CMB Measurements and Early Universe Physics" APS Meeting, Tampa, FL, U.S.A.
- Apr 2005: "Can Cosmology Test Stringy Physics?" Hubble Fellows Symposium, Space Telescope Science Institute, U.S.A.
- Mar 2005: "Can Cosmology Test Stringy Physics?" Astro-Cosmo Seminar, University of Pennsylvania, U.S.A.
- Feb 2005: "Can Cosmology Test Stringy Physics?" KIPAC Coffee Talk, Stanford Linear Accelerator Center, U.S.A.
- Jan 2005: "Observing Trans-Planckian Signatures in the Cosmic Microwave Background" KICP Seminar, Univ. of Chicago, U.S.A.
- Jan 2005: "Constraining Early Universe Physics using Cosmology: Present and Future" YCAA Seminar, Yale University, U.S.A.
- Dec 2004: "WMAP and Early Universe Cosmology" Cosmology Seminar, Institute for High Energy Physics, Beijing, China
- Dec 2004: "WMAP and the Very Early Universe" String Cosmology Workshop, National Taiwan Normal University, Taipei, Taiwan
- Dec 2004: "WMAP and Early Universe Cosmology" 8th Paris Cosmology Colloquium, Ecole Internationale Daniel Chalonge, Paris, France
- Dec 2004: "1.5 Year Results from WMAP" HEP/Astro Seminar, Univ. of Michigan, Ann Arbor, U.S.A.
- Nov 2004: "Can we see Planck/String Physics in the Cosmic Microwave Background?" TAC Seminar, U.C. Berkeley, U.S.A.
- Sept 2004: "Can we see Planck/String Physics in the Cosmic Microwave Background?" UK Cosmology Workshop, Edinburgh, U.K.
- Aug 2004: "Can we see Planck/String Physics in the Cosmic Microwave Background?" Wednesday Astrophysics Seminar, Institute of Astronomy, University of Cambridge, U.K.
- Jul 2004: "Can we see Planck/String Physics in the Cosmic Microwave Background?" 20th IAP Colloquium on CMB Physics and Observation (contributed talk), Paris, France
- Jun 2004: "Constraining Dark Energy with Cosmic Microwave Background Observations" Plenary Speaker, 10th Annual German-American Frontiers of Science Symposium, Hamburg, Germany
- Feb 2004: "Cosmic Microwave Background and WMAP Results" Winter Conference on Particle Physics, Aspen Center for Physics, Aspen, CO, U.S.A.
- Dec 2003: "First Year WMAP Results: Implications for Cosmology and Inflation" Astrophysics Seminar, U.C. Santa Barbara, U.S.A.
- Nov 2003: "First Year WMAP Results: Implications for Cosmology and Inflation" Theoretical Astrophysics

- and Relativity Seminar, California Institute of Technology, U.S.A.
- Nov 2003: “First Year WMAP Results: Implications for Cosmology and Inflation”, Principal Speaker, 6th RESCEU International Symposium on *Frontier in Astroparticle Physics and Cosmology*, Tokyo, Japan
- Oct 2003: “First Year WMAP Results: Implications for Inflation” Astrophysics Seminar, University of Manchester (Jodrell Bank), U.K.
- Oct 2003: “First Year WMAP Results: Implications for Inflation” Wednesday Astrophysics Seminar, Institute of Astronomy, University of Cambridge, U.K.
- Jun 2003: “Future Cosmology with WMAP” Aspen Workshop on *The Microwave Background after WMAP*, Aspen Center for Physics, Aspen, CO, U.S.A.
- Apr 2003: “First Year WMAP Results: Implications for Cosmology and Inflation” Spring Astrophysics Colloquium, Princeton University, U.S.A.
- Apr 2003: “First Year WMAP Observations: Implications for Inflation” Astrophysics Seminar, Institute for Advanced Study, U.S.A.
- Mar 2003: “First Year WMAP Observations: Implications for Inflation” Theory Group Seminar, Brown University, U.S.A.
- Mar 2003: “First Year WMAP Observations: Implications for Inflation” CfA Theoretical Physics Division Seminar, Harvard University, U.S.A.
- Mar 2003: “First Year WMAP Satellite Results & their Implications for Inflation” Keynote Speaker, Royal Astronomical Society Meeting on *Cosmic Microwave Background and Fundamental Physics*, London, U.K.
- Mar 2003: “First Year WMAP Satellite Results & their Implications for Inflation” Astrophysics Seminar, University of Sussex, U.K.
- Feb 2003: “First Year WMAP Observations: Implications for Inflation” 2nd CMBNet Workshop on “Science and Parameter Extraction”, Oxford, U.K.
- Feb 2003: “First Year WMAP Observations: Implications for Inflation” Astronomy Department Colloquium, Columbia University, U.S.A.