

Olivier DORÉ

CONTACT INFORMATION

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PROFESSIONAL EXPERIENCE

- 08/20 - present • Principal Scientist, **JPL, NASA/Caltech**
- 06/21 - present • Senior Faculty Associate, **PMA, Caltech**
- 07/09 - present • Research Scientist, **JPL, NASA/Caltech**
- 05/18 - present • Visiting Scholar, **ASIAA, Taipei, Taiwan**
- 02/15 - 05/19 • Group supervisor, “Origin of the Universe” [research group](#), **JPL, NASA/Caltech**
- 09/05 - 06/09 • Senior Research Associate, **CITA, University of Toronto**
- 09/02 - 08/05 • Research Associate, **Dept of Astrophysical Sciences, Princeton University**

- 11/99 - 12/01 • PhD student (Paris VI) under the supervision of *F.R. Bouchet*
Institut d’Astrophysique de Paris
PhD defended and awarded on the 22nd of December 2001
 - Scholar from the **DEA (MSc) de Physique Théorique** (École Normale Supérieure, École Polytechnique, Paris VI, Paris VII, Paris XI)

- 09/96 - 07/97 • *Certificate of Advanced Studies in Mathematics*
DAMTP, Cambridge University, UK
Part III of the Mathematical Tripos - *with honours*

- 09/94 - 10/97 • **Ecole Centrale de Paris** - Specialized in Physics
• **Université Paris IV Sorbonne**
Certificate of *Philosophy of Sciences*, degree level

RESEARCH INTERESTS

- Theoretical cosmology and astrophysics
- Physics and probes of the very early Universe
- Physics and probes of the reionization era
- The dark energy and dark matter problems
- Space mission design and implementation
- Data science

HONORS AND AWARDS

- JPL Voyager award, June 2016, September 2017, September 2019, July 2022
- JPL Explorer award, August 2019
- European Physical Society *Giuseppe and Vanna Cocconi Prize* to Planck and WMAP, 2019
- Gruber 2018 Cosmology Prize awarded to the Planck Team and PIs Mandolesi and Puget
- Marcel Grossman institution award to the Planck Scientific Collaboration (July 2018)
- Breakthrough Prize in Fundamental Physics 2018 awarded to Charles Bennett and the WMAP team
- Royal Astronomical Society 2018 Group Achievement Award with the Planck team
- NASA Group Achievement Award to WFIRST (now Roman) Project Team 2017
- JPL Team award, September 2016
- JPL Team award for outstanding contribution to the SPHEREx Proposal Team, February 2015, April 2017, April 2017, May 2019
- JPL Mariner award, May 2013
- Gruber 2012 Cosmology Prize awarded to Charles Bennett and the WMAP team
- NASA Group Achievement Award (as a member of the NASA Planck satellite science team), June 2009, July 2011, September 2014
- NASA Group Achievement Award (as a member of the NASA WMAP satellite science team), May 2007
- Fellow of the *Société de secours des amis des sciences*,

RESEARCH FUNDING & SUPPORT

- **PI**, *Maximizing Cosmological Science with the Roman High Latitude Imaging Survey (HLIS)*, Roman Project Infrastructure Team, July 2023, \$19.6M
- **Co-I**, *Detecting Microhertz Gravitational Waves with the Nancy Grace Roman Space Telescope*, Roman Wide Field Science, PI T.-C. Chang, July 2023, \$335k
- **Co-I**, *Machine learning the Roman Universe*, Roman Wide Field Science, PI S. Ho, July 2023, \$350k
- **Co-I**, NASA TCAN, *Machine learning the large-scale structure of the Universe*, PI U. Seljak, July 2023, \$1.5M
- Collaborator, Simons Foundation, *Simons Astrophysics Group at ICISE*, PI Hien Nguyen
- **Co-I**, NASA ADAP, *Detecting Gravitational Waves from Supermassive Black Holes with Kepler*, PI T-C Chang, November 2022, \$736k
- **Co-I**, NASA ADAP, *Tomographic study of the Extragalactic Background Light through COBE and Planck*, PI T-C Chang, November 2021, \$750k
- **PI**, NASA ADAP, *Dust Emission after Planck and Gaia*, November 2020, \$760k
- **PS**, NASA SMD Explorer Program (MIDEX), *SPHEREx, An All Sky Spectral Survey*, PI J. Bock, selected for launch, February 2019, \$242M
- **Co-I**, NASA Innovative Advanced Concepts (NIAC, step II), *A direct probe of dark energy interactions with a Solar System laboratory*, PI Y. Nan, \$500k
- **PI**, JPL Data Science Pilot Program, *Teaching Machines the Way of the CMB*, \$50k, FY19
- **PI**, Heising-Simons Foundation, *Observing the Origin of the Universe*, \$150k, September 2019
- **Co-I**, NASA ADAP, *Revisiting Absolute Radio Backgrounds in Light of Juno Cruise Data*, PI T.-C. Chang, \$550k, October 2017
- **PS**, NASA SMD Explorer Program (MIDEX), *SPHEREx, An All Sky Spectral Survey*, PI J. Bock, selected for Phase A, August 2017, \$8M
- **Co-I**, NASA SMD Astrophysics Probes Mission Concept Studies, *CDIM: Cosmic Dawn Intensity Mapper*, PI A. Cooray
- Collaborator, NASA SMD Astrophysics Probes Mission Concept Studies, *Cosmic Microwave Background Polarization Probe*, PI S. Hannany
- **Co-I**, NASA SMD Astrophysics Probes Mission Concept Studies, *Galaxy Evolution Probe*, PI J. Glenn
- **Co-I**, NASA Innovative Advanced Concepts (NIAC), *A direct probe of dark energy interactions with a Solar System laboratory*, PI Y. Nan, \$125k

- Collaborator, NASA Astrophysics Data Analysis Program, “Analyzing Planck and low redshift data sets with advanced statistical methods”, PI T. Eifler, \$450k
- **PI**, NASA WFIRST Science Investigation Team, *Cosmology with the WFIRST High Latitude Survey*, November 2015, \$8.4M
- **PI**, Heising-Simons Foundation, *Observing the Origin of the Universe*, \$507k, September 2015
- **Co-I**, JPL Special University Research Partnership, *Combining CMB (ACTPol, Stage IV) and Weak Lensing data (HSC, Euclid, WFIRST, LSST)*, PI: J. Rhodes/D. Spergel (Princeton), \$90k, 2015-16
- **Co-I**, JPL Research and Technology Development (RTD) (with PI Jamie Bock) *Measuring B-mode Polarization with BICEP3*, \$200k, August 2015
- **Co-I**, JPL Research and Technology Development (RTD) (with PI Michael Seiffert, JPL) *A global approach to the “Global Signal” Measurement from the Epoch of Reionization*, \$400k, August 2015
- **PS**, NASA SMD Explorer Program (SMEX), Phase A selection, *SPHEREx, An All Sky Spectral Survey*, PI J. Bock, \$1M, September 2015
- **PI**, NASA ATP, *Extracting Primordial Non-Gaussianity from Large Scale Structure in the Post-Planck Era*, \$550k, December 2014
- **PI**, NASA ADAP, *Extragalactic Backgrounds after Planck*, \$550k, October 2014
- JPL **PI**, JPL/Caltech President’s and Director’s Fund (PDF), *Probing Inflationary CMB Polarization with BICEP3*, \$400k, March 2014
- **PI**, JPL Special University Research Partnership, *New Probes of Reionization*, co-I: P. Shapiro (UT Austin), \$25k, 2013-
- **Co-I**, JPL Research and Technology Development (RTD) (with Jamie Bock, Caltech) *Understanding the acceleration of the universe: precision dark energy*, PI: J. Rhodes, \$350k/yr, March 2013-
- **PI**, NSF AST, *Deciphering the Cosmic Infrared Background*, \$450k, July 2013
- **PI**, JPL Research and Technology Development (RTD) (with Jamie Bock, Caltech) *Probing Inflationary CMB Polarization at 95 GHz with BICEP3*, \$145k, March 2013
- **Co-I**, JPL/Caltech President’s and Director’s Fund (PDF): “Unraveling the Dark Universe with the Subaru Prime Focus Spectrograph (PFS)”, PI: M. Seiffert, R. Ellis, \$1M, March 2013
- **Co-I**, NASA Science Investigations as Members of the Euclid Consortium and Euclid Science Team, *Science With the Euclid Mission*, PI: J. Rhodes, \$40M, 2013-
- **PI**, NASA ATP, *Optimal Cosmological Inference from Lensing and Redshift Observations: Cosmology without Cosmic Variance*, co-I: J. Rhodes, D. N. Spergel, \$800k, 2012-2016
- **PI**, NASA ATP, *Probing Inflation with Large Scale Structure Surveys*, \$300k, 2011-2015
- **Co-I**, NASA/ESA Herschel Time Allocation Committee, *Detecting kinetic SZ With Herschel/SPIRE and SPT*, PI J. Carlstrom (U. Chicago), 100 hrs, \$220k
- **Co-I**, JPL Research and Technology Development Fund, *Making the best of weak-lensing surveys*, PI J. Bartlett, \$400k, 2010-13
- **Co-I**, European Research Council, *MISTIC: Mastering the dusty and magnetized Interstellar Screen to Test Inflation Cosmology*, PI: F. Boulanger (Institut d’Astrophysique Spatiale), 1.8MEuros, 2010-15
- **PI**, JPL Special University Research Partnership, *New Probes of Early Dark Energy*, co-I: R. Caldwell (Darmouth), \$90k, 2010-11

PROFESSIONAL ACTIVITIES

- Management:* • Group supervisor for the “Origin of the Universe” [research group](#) at the **Jet Propulsion Laboratory, NASA/Caltech**. This group consists of about 14 research scientists plus associated postdocs. (2015-2018)
- Committee:* • *Physics of the Cosmos Program Analysis Group (PhysPAG)* Executive Committee member, (2014-2018)
- *PhysPAG Cosmic Structure Scientific Interest Group (CoSSIG)*, co-chair (w/ Rachel Bean), (2015-2018)

- Collaboration:*
- **PI**, Maximizing Cosmology with the High Latitude Imaging Survey **Roman Project Infrastructure Team (PIT)**,
 - **PI**, Weak Lensing and Cluster Growth/Galaxy Redshift Clustering **WFIRST Science Investigation Team (SIT)**, *Cosmology with the WFIRST High Latitude Survey*, [\[Link\]](#) (2015-2022)
 - Member of the **WFIRST Formulation Science Working Group (FSWG)** (2015-2021)
 - **PS**, for the SPHEREx MDEX mission (PI: J. Bock), selected
 - **PS**, for SPHEREx SMEX mission (PI: J. Bock), selected for Phase A
 - Team member for the TIM Balloon, funded by NASA APRA (2018-)
 - Science Working Group Member, The Cosmological Advanced Survey Telescope for Optical and UV Research (**CASTOR**), PI P. Côté (2018-)
 - Team member of the **CMB experiments**: *SPIDER*, *BICEP3*, *Planck LFI/HFI (Core Team)*, *WMAP* (2003-2006) and *Archeops*
 - Full **NASA/ESA Euclid** consortium member
 - Permanent **LSST Dark Energy Science Consortium (DESC)** member
 - Member of Subaru Measurement of Image and Redshifts **SuMIRe** collaboration.
 - Past member of the weak-gravitational lensing survey *Canada-France Hawaiian Legacy Survey (CFHTLS)*
 - Team theorist for the past **NASA Joint Dark Energy Mission (JDEM) DESTINY** (Supernovae and weak-gravitational lensing)
 - Cornell-Caltech Atacama Telescope (**CCAT**) working group member
 - Square Kilometer Array (**SKA**) working group member

- Reviewing:*
- Regular referee for *Monthly Notices*, *Astronomy & Astrophysics*, *Physical Review Letter*, *Physical Review D*, *Astrophysical Journal*, *Journal of Cosmology and Astroparticle Physics*
 - *Canadian Institute for Advanced Research Gravity and Cosmology* program reporter
 - Reviewer for the French, Dutch, South Africa, European, Israeli research funding agency
 - National Science Foundation (NSF) proposal review panel member, 2011
 - French Polar “Paul Émile Victor” Institute grant evaluation
 - NASA Astrophysics Theory Program panel chair
 - Reviewer for NASA Data Analysis Program
 - IRSA - NASA/IPAC Infrared Science Archive user panel
 - Reviewer for the UCB/LBL Director review for DESI

- Organizing:*
- Co-organizer of Inflation focused workshop in Madrid. Cancelled because of COVID
 - Online Roman SIT workshop session organization, November 2021
 - Co-organizer (with Dida Markovic) a two day remote workshop dedicated to the Roman Space Telescope Pilot Survey, September 2020
 - Co-organizer, “Inflationary Imprints in Large Scale Structure”, Lorentz center, Leiden, NL, June 2020, postponed several times because of COVID
 - Co-organizer, “Inflationary Imprints in Large Scale Structure”, Lorentz center, Leiden, NL, June 2020
 - SOC, *Rencontres du Vietnam, Windows on the Universe*, Qui Nonh, Vietnam, August 2018
 - Co-organizer “ Exploiting Extra-galactic Synergies between WFIRST and Future Facilities” workshop, February 2018, Caltech
 - SOC, “Venice Workshop 2018 - A cosmology workshop in Venice”, May 2018
 - Co-organizer, Aspen Center for Physics conference, “Intensity Mapping the Universe”, Winter 2018
 - Co-Chair, “Astrophysics with the SPHEREx All-sky Spectral Survey II: SPHEREx Synergies”, CfA, Harvard, January 2018
 - SOC, “Second Annual Intensity Mapping Workshop”, JHU, USA, June 2017
 - SOC, “Early stages of Galaxy Cluster Formation”, ESO, Munich, Germany, June 2017
 - Co-organizer, “Unifying Tests of General Relativity”, Burke Institute Workshop, Caltech, July 2016
 - SOC for “Challenges and Opportunities in Intensity Mapping” conference, KIPAC, Stanford, March 2016

- Co-Chair (w/ M. Werner), for “Astrophysics with the SPHEREx All-sky Spectral Survey”, A Community Workshop on the New Science Enabled by the SPHEREx Optical to Near-Infrared Spectroscopic Survey”, Caltech, February 2016
- Session Chair, “Cosmology and Dark Matter”, AAS, Florida, 01/16
- Lead organizer, Aspen Center for Physics Summer 2-week working group, “Cosmology with Tidal Fields”, Aspen, CO, August 2015
- Co-organizer, Aspen Center for Physics Winter Conference, “Cosmology on the slopes”, Aspen, CO, March 2015
- Co-organizer/founder of the Pacific Cosmology Cooperative meeting at JPL, Pasadena (04/14) and Berkeley, CA, October 2014)
- Co-organizer, CITA Workshop, “Testing Inflation with Large Scale Structure: Connecting Hopes with Reality”, Toronto, Canada, October 2014 [Link]
- Cosmology session convener, “19th International Symposium on Particles, Strings and Cosmology”, Taiwan, November 2013
- Lead, Aspen Center for Physics study group, 1-week working group, “Cosmology in the Intensity Mapping regime”, Aspen, CO, June 2013
- Co-organizer, Aspen Center for Physics Summer 3-week workshop, “The Obscured Universe: Dust and Gas in Distant Starburst Galaxies”, Aspen, CO, May-June 2013
- Co-organizer, “Mining the Cosmic Frontier in the Planck Era Fundamental Questions in Cosmology”, UC Davis, May 2013
- Co-organizer, “Infrared cosmology” School, Banyul, France, October 2013
- Co-lead, Keck Institute for Space Studies, Caltech-JPL, 1 week “brain-storming” closing workshop, “The Future of CMB Polarization”, July 2012
- Co-organizer, Aspen Center for Physics Winter Conference, “Inflationary theory and its confrontation with data in the Planck era”, January 30 – February 4, 2012
- Co-organizer, Aspen Center for Physics Summer 3-week workshop, “Non-gaussianity as a window to the Primordial Universe”, Aspen, CO, May-June 2012
- Co-lead, Keck Institute for Space Studies, Caltech-JPL, 1 week “brain-storming” closing workshop, “The First Billion Years”, August 2011
- Co-lead, Keck Institute for Space Studies, Caltech-JPL, 1 week “brain-storming” workshop, “The First Billion Years”, August 2010
- Scientific Organizing Committee member, *Reionization with Multi-frequency Datasets*, Stockholm, August 2009
- Co-organizer of the CITA/CIFAR workshop *Upcoming lensing surveys: Beyond the Obvious*, Toronto, June 2008
- Chairman of a session on lensing statistical methods, IAP Colloquium, July 2007
- Co-organizer of *Cosmology on the Great Lakes meeting*, Perimeter Institute, November 2006
- Organizer of the *Marcel Grossman XI*, CMB theory session, Berlin, July 2006

Other:

- Co-founder/organizer of the Pacific Cosmology Cooperative (PaCCo)
- Co-founder/administrator of the cosmology oriented professional web forum [CosmoCoffee](#) (\simeq 1800 registered professional users, \simeq 1000 hits/week)
- Member of the *American Astronomical Society*
- PhD defense committee member (Aur lie P nin, Universit  Paris Sud, 09/11; Nicolas Taburet, 09/10, Fabien Lacasa, 09/13, Victor Bonjean, 09/19)
- PhD candidacy exam Tejaswi Venumadhav (Caltech, 06/14), Abhilash Mishra (Caltech 12/14, 03/17), Alicia Lanz (Caltech 03/16), Denise Schmitz (Caltech 03/17), Howard Hui (Caltech 01/18), Michael McAneny (Caltech 01/18), Alec Ridgway (Caltech 05/19), Cheng Zhang (Caltech 05/19)

TEACHING EXPERIENCES

- | | |
|-------|---|
| 02/17 | • Guest lecturer , <i>Cosmic Microwave Background and Cosmological Parameters</i> , Graduate Student Astrophysics Course, Caltech |
| 05/15 | • Invited lecturer , <i>Observer et comprendre l’ volution de l’Univers</i> , Marseille, France |
| 04/13 | • Invited lecturer , <i>Exploiting the Herschel and Planck data</i> , S vres, France
<i>Two lectures on the Cosmic Microwave Background</i> |

- 09/12 • **Invited lecturer, *Deciphering the CIB*, Banyuls, France**
Two lectures on the Cosmic Infrared Background
- 04-06/10 • **Teaching a section Ph101C (Electro-magnetism) at Caltech**
- 06/09 • **Invited lecturer, Perimeter Institute, Waterloo, ON**
5 lectures at graduate level on Observational Cosmology
- 03/08 • **Invited lecturer, Mc Gill CMB Winter School**
1 lecture at graduate level on CMB observation
- 02/07 • **Invited lecturer, Nagoya, Japan**
Japanese Cosmology Winter School
- 09/06 • **Invited lecturer, Nasulec, Nasu, Japan**
Asian School of Particles, Strings and Cosmology
- 06/05 • **Invited lecturer, Chalonge School, Paris**
Physics of the early universe confronts observations
- 12/04 • **Invited lecturer, Chalonge School, Paris**
WMAP and the early universe
- 04/02 • **Invited lecturer, Princeton University**
lecture on *CMB secondary anisotropies*, Graduate course, *Prof. U. Seljak*
- 10/01 • **Invited lecturer, Cosmology School, Porquerolles, France**
CMB physics and current challenge in CMB data analysis
- 10/98-06/99 • **Université de Savoie, Annecy-le-Vieux**
Lecturer in Mathematics, first year college student

MENTORING STUDENTS AND POSTDOCS

- Undergrad.:** Sujay Champati (SURF 2023), Kailai Wang (SURF 2023), Carlos Pareja (SURF 2022), Joshua Benabou (SURF 2021), Isabel Sands (SURF 2021), Gao Zucheng (VURP 2019), George Driskel (SURF 2019), Yash Kankanampati (SURF 2019), Gabriela Satie (SURF, Sao Paolo, 2017), Amanda Brown (SURF Princeton, 2016), Roohi Dalal (SURF Caltech, 2016, 2018), Kit Cinnetti (SURF, Caltech 2015), Christina Kreisch (MURF, Caltech 2015), Daniel DePhillips (SURF, Caltech 2014), Marie Martig (Toronto, 2007), J. Munoz (w/ D. Spergel, 2003), A. Klainerman (2003)
- Graduates:** Robin Wen (w/ J. Bock, 2023-), Adriano Testa (w/ M. Wyse, 2021-), Wang Yijun (Ali) (2019-), Shi Yanlong (w/ P. Hopkins, 2019-2023), Abhilash Mishra (w/ C. Hirata, 2012-2017), Tejaswi Venumadhav (w/ C. Hirata, 2012-15), Steven Osborne (w/ S. Church, 2013-14), A. Pénin (w/ G. Lagache, 2010-13), Joachim Harnois-Déraps (w/ U.-L. Pen), Marzieh Farhang (w/ D. Bond), Lu Ting-Ting (w/ U.-L. Pen), Aurélien Fraisse (w/ D. Spergel), Joseph Hennawi (w/ D. Spergel),
- Postdocs:** Spencer Everett (2023-, w/ E. Huff and J. Rhodes), Yun-Ting Cheng (2022-), Henry Gebhardt (2019-), Ashmeet Singh (2020-2022, faculty at Whitman College), Kris Pardo (2019-2022, faculty at USC), Chen He Heinrich (2017-2022, research scientist at Caltech), Daniel Lenz (2016-2019, data scientist), Elisabeth Krause (2017-2019, faculty at U. Arizona), Phil Bull (2015-2017, lecturer at Queen Mary U. London), Jérôme Gleyzes (2015-2018, data scientist), Paolo Serra (2015-2017, data scientist), Wu Hao-Yi (Heidi) (2014-2017, faculty at Boise State U.), Roland de Putter (2012-2018, data scientist), Alvis Raccanelli (2011-2014, faculty at U. Padova), Anthony Pullen (2011-2014, faculty at NYU), Duncan Hanson (2009-2013, @Google)

OTHER EXPERIENCES

- 07/03 **IAS Summer School, *Prospects in Theoretical Physics: Cosmology, Particle, Strings***
- 11/00 **Vème Cosmology School** (Modelisation and statistical tools), Porquerolles
Lecture given on problems in data analysis in current CMB experiments
- 08/99 **NATO ASI school, *M-Theory and Quantum Geometry***, Akureyri (Iceland)
- 03/99 Miraflores Spring School 1999, Madrid
*TMR-network school *Integrability, Non-perturbative effects and Symmetry in Quantum Field Theory**

- 09/97–06/98 • *Military Service as a scientific researcher*
Laboratoire Léon Brillouin, CEA/CNRS, Saclay
 Study of magnetism in powders using neutron diffraction
- 04/97–06/97 • Essay on *Resummation in Field Theories at Finite Temperature*
DAMTP (Cambridge, UK), under the direction of *P. Landschoff*
- 06/95–08/95 • **CERN, Genève, Suisse**, *Participation to the Summer Student program*
- 06/95–08/95 • Internship at **Laboratoire de l'Accélérateur Linéaire**, CNRS, Orsay
 under the direction of *E. Augé*, participation to the development of the ATLAS experiment (LHC), co-author of CERN/ATLAS internal note
- 06/95–08/95 • Research Projet *Vortices in supra-conductor materials of Type II*
Laboratoire de Physique des Matériaux (ECP/CNRS), under the direction of *Prof. B. Jouffrey*

SELECTED SCIENTIFIC COMMUNICATIONS

- 2023** *Conference Plenary Talks, Colloquia, Seminar:*
 - Invited lecturer (remote) to Future Cosmology” school in Cargese, France
 - Invited talk to UVEX workshop at Caltech, USA
 - Invited talk (declined) to “Cosmology – the next decade” /conference in Bangalore, India
 - Invited talk (declined) to cosmology workshop in Venice, Italy
 - Invited talk (declined) to cosmology conference in Quy Nhon, Vietnam
 - Invited talk (declined) to “From the Galaxy to the Big Bang”, Banyuls, France
 - Invited talk (declined) to CMB-S4 collaboration meeting
- 2022** *Conference Plenary Talks, Colloquia, Seminar:*
 - Keynote speaker (remote) in Primordial Non-Gaussianity workshop in Madrid, Spain
 - Invited speaker (remote) to cosmology “focus workshop” in South Korea
 - Invited lecturer (declined) to 2 weeks cosmology school in ICTP Trieste, Italy
 - Presentation to the decadal mandated NAS CAA about Roman cosmology
 - Invited talk (declined) to workshop on primordial non-Gaussianity in Haifa, Israel
 - Invited talk (declined) to CMB-S4 collaboration meeting
 - Invited colloquiums in Perimeter Institute, Paris (IAP), Dark Energy consortium (France).
- 2021** *Conference, Plenary Talks, Colloquia, Seminar:*
 - Invited colloquiums at CEA Saclay, Stockholm, Manchester, Geneva, Paris, Montreal, ...
- 2020** *Conference, Plenary Talks, Colloquia, Seminar:*
 - Invited contributions to India conference, Madrid, Kyoto, Maryland workshops, Salt Lake City ...
- 2019** *Conference, Plenary Talks, Colloquia, Seminar:*
 - Invited presentations at IAS (Princeton), University of Utah, Canadian Institute for Advanced Research, LSST DESC seminar, Euclid Collaboration meeting keynote, Flatiron Institute CCA, University of Pennsylvania Workshop, CMB-S4 workshop, CMB foregrounds for B-mode studies (Canary Island, Spain), CosmoGold Paris 2019, ENS Paris, J-PAS collaboration
- 2018** *Conference, Plenary Talks, Colloquia, Seminar:*
 - Invited seminar, Lawrence Berkeley Laboratory
 - Invited talk, *Windows on the Universe*, Quy Nhon, Vietnam, August
 - Invited participation, *Analytics, Inference, and Computation in Cosmology*, Institut Henri Poincaré, Paris, France, September 2018
 - Invited contribution, “Post-Planck Cosmology: Enigma, Challenges & Vision”, Pune, India
 - Invited contribution, “Cosmology with Cosmic Voids”, CCA, New York, USA
 - Invited contribution, “Studying the Universe with GALaxy suRveys - Revealing the Unlimited in ShangHai” , Shanghai, China
 - Invited contribution, Berkeley Center for Cosmological Physics (BCCP), “Modeling the Extragalactic Sky”, January

- Invited contribution, “The Particle Frontier”, Aspen, CO, USA, March

2017

Conference, Plenary Talks, Colloquia, Seminar:

- Invited “important participant” to *Advances in Theoretical Cosmology in Light of Data*, Nordita, Sweden, July
- Invited plenary speaker, *CosKASI conference II*, KASI, Daejeon, Korea April
- Invited review talk, *Rencontres du Vietnam, Exploring the Dark Universe*, Quy Nhon, Vietnam, July
- Invited participation to *The Non-linear Universe*, Smartno, Slovenia, July
- Invited colloquium, Kansas State University
- Invited (remote) colloquium, Florida State University
- Invited seminar, University of Washington, Seattle
- Invited contribution, “Post-Planck Cosmology: Enigma, Challenges & Vision”, Pune, India
- Invited talk, *Second Annual Intensity Mapping Workshop*, JHU, USA, June

2016

Conference, Plenary Talks, Colloquia, Seminar:

- Invited contribution, “New technologies for Discovery (CPAD, APS)” workshop Caltech, 10/16
- Invited plenary talk “Interplay between Particle and Astro-particle physics conference 2016”, Orsay, France, 10/16
- Invited plenary talk “Cross-correlation Spectacular with LSST: Exploring Synergies Between LSST and External Datasets to Discover Fundamental Physics.”, Brookhaven, USA 07/16
- Invitation to “Cosmology Using Low Resolution Spectroscopy in the 2020s”, Chicago, USA 02/16
- Invitation to “Cosmological Frontiers 2016”, Perimeter Institute, Waterloo, Canada, 07/16
- Invitation to colloquium in Perimeter Institute (Canada), Penn State, (State College, PA, USA), ASIAA (Taipei, Taiwan)
- Invited contribution to “CMB Foregrounds Symposium”, Geneva, Switzerland, 07/16
- Invitation to “CMB Spectral Distortions from Cosmic Baryon Evolution”, Raman Research Institute, Bangalore, India, July 2016
- Invitation to “From Cosmic Strings to CMB Observations”, Paris, France 03/16
- Invitation to “Biased Tracers and Large-Scale Structures”, Lorentz Center in Leiden during the week July 4–8 2016
- Invited contribution to AAS Special Session on “Intensity Mapping” , Florida, 01/16

2015

Conference, Plenary Talks, Colloquia, Seminar:

- Invited colloquium, Arizona State University, USA 02/16
- Invited colloquium, Stanford Physics Dpt, USA 10/15
- Invited presentation to CPAD, Arlington, TX, USA 10/15
- Invited contributions, *CMB: 50 years after*, Quy Nhon, Vietnam, 08/15
- Invited colloquium, UC Irvine, USA 05/15
- Invited colloquium, UC Davis, USA 03/15
- Invited contribution, *Meeting on Fundamental Cosmology*, Santander, Spain, 06/15
- Invited contribution, *Preparing for the 21-cm Cosmology Revolution*, Irvine, USA, 10/15
- Invited contribution, *Reionization*, AAS, Baltimore, USA, 06/15
- Contribution, *Cosmology with the CMB and its Polarization*, Minneapolis, Minnesota, 01/15

2014

Conference, Plenary Talks, Colloquia, Seminar:

- Invited keynote presentation, American Physical Society (APS), 04/15
- Invited colloquium, Carnegie Mellon University, Pittsburgh, USA 04/15
- Invited contribution, ASIAA Workshop “Dawn of new cosmology”, Taiwan, Taipei, USA 11/14
- Invited talk, KITP Conference, “Gravity’s Loyal Opposition: The Physics of Star Formation Feedback”, Santa Barbara, USA 06/14
- Invited talk, Caltech Burke Institute Workshop, 05/14, Caltech, USA 05/14
- Invited workshop lecture, ASIAA, Taipei, Taiwan, 12/14
- Invitation to lecture on Planck at CRAQ, Québec, Canada, 05/14
- Invitation to lecture on Planck at Canadian Institute for Advanced Research, Québec, Canada, 05/14

- Invited presentation to “Dark Matter 2014”, UCLA, 03/14
- Invited colloquium, University of Illinois at Urbana Champaign, UC Berkeley, Stony Brook University

2013

Conference, Plenary Talks, Colloquia, Seminar:

- Keynote speaker, “New Challenges for Early Universe Cosmologists” workshop, Lorentz Center, Leiden, The Netherlands, 08/13
- Invited colloquium, ESWA, Seoul, South Korea, 06/13
- Invited contribution to “Reconstructing the Universe”, IEU Cosmology Conference, Seoul, Korea, 06/13
- Invited colloquium, Stanford KIPAC, 05/13
- Invited contribution, “Observations and Theoretical Challenges in Primordial Cosmology”, KITP, Santa Barbara, 05/13
- Invited contribution to “ESLAB 2013: The Universe as seen by Planck”, ESA/ESTEC, Noordwijk, The Netherlands, 04/13
- Invited contribution to “Cosmic Frontier Workshop 2013”, Stanford, 03/13
- Declined invitations to “Rencontres du Vietnam”, Hanoi, Vietnam 07/13; “Reionization in the Red Center”, Uluru-Kata Tjuta, Australia, 07/13; Princeton “Planck workshop”, Princeton, 06/13; University of Michigan “Cosmology after Planck”, Ann Harbor, 09/13

2012

Conference, Plenary Talks, Colloquia, Seminar:

- Invited colloquium at CEA Saclay, France, “CO mapping as a probe of the high-redshift universe”, 10/12
- Invited colloquium at ASIAA, Taipei, 11/12

2011

Conference, Plenary Talks, Colloquia, Seminar:

- Invited plenary talk in “Unveiling the Far-IR and Sub-mm Extragalactic Universe”, UC Irvine, 04/11
- Invited talk at Princeton Planck Fest, 02/11
- Invited colloquium at ASIAA, Taipei, 03/11
- Invited colloquium at UC Davis, 04/11
- Invited seminar in Berkeley Theoretical Astrophysics group, 04/11
- Invited talk in Berkeley CMB lensing workshop, 04/11
- Invited colloquium, Nagoya University, 08/11
- Invited seminar, Nagoya University, 08/11
- Invited seminar, IPMU, Tokyo, 09/11
- Contribution, “Galaxy mergers”, Hualien, Taipei, 10/11
- Invited seminar, UC Santa Cruz, 12/11

2010

Conference, Plenary Talks, Colloquia, Seminar:

- Invited talk to Fermi workshop, Ohio State University, 06/10
- Review talk, Aspen workshop, 06/10
- Invited colloquium, UC Irvine, 02/10
- Invited seminar, CEA Saclay, 09/10

2009

Conference, Plenary Talks, Colloquia, Seminar:

- “Understanding the Dark Sector”, Aspen, 01/09
- Institut d’Astrophysique Spatiale (IAS), Orsay, 09/09
- “Dark Energy 09”, APC, Paris, 09/09

2008

Invited Conference Plenary Talks, Colloquia, Seminar:

- “Cosmological Microwave Background”, Aspen, 01/08
- Invited Review, Canada Theory 4, 06/08
- Harvard University Institute for Theory and Computation (ITC), 11/08
- ICG, Portsmouth University, UK, 12/08
- Imperial College, London, 12/08

2007

Invited Conference Plenary Talks, Colloquia, Seminar:

- Colloquium at Simon Fraser University, Vancouver, 03/07
- The Astrophysics of Near-Term Cosmological Observations, Perimeter Inst., 11/07
- “Colloque IAP 2007: From giant arcs to CMB lensing”, Paris, 07/07
- “Life beyond Gaussian”, Workshop, KICP Chicago, invited contribution, 06/07
- “Origins of Dark Energy”, Review, Origins Institute, McMaster University, 05/07

2006

Invited Conference Plenary Talks:

- “The end of Dark Ages”, Review, STSCi Baltimore, MA, 03/06
- “CIFAR Gravity and Cosmology annual meeting”, Banff, AL, 02/06
- “Fundamental Physics With CMB”, Irvine, CA, 03/06
- “Workshop on Non-gaussianity in Cosmology”, ICTP Trieste, Italy, 07/06
- “16th Kingston in Kingston Cosmology meeting”, Kingston, 07/06
- “Modern Cosmology, Inflation, CMB and LSS”, Review, Benasque, 08/06

2006

Invited Seminars/Colloquia:

- “COSMO06 conference”, Review, Tahoe, CA, 09/05
- “Asian School of Particles, Strings and Cosmology”, Nasu, Japan, 09/05
- “International Symposium on Cosmology and Particle Astrophysics”, Taipei, Taiwan, 11/06
- “Japanese Cosmology Winter School”, Nagoya, Japan, 02/07
- Berkeley Physics Dept (03/06)
- Lawrence Berkeley National Laboratory (03/06)
- Perimeter Institute (Waterloo, Canada, 04/06)
- University of Victoria (04/06)
- Institut d’Estudis Espacials de Catalunya - IEEC (Barcelona, Spain, 05/06)
- Laboratoire d’Astrophysique de Toulouse (Toulouse, France, 09/06)
- Laboratoire de Physique Théorique, Jussieu (Paris, France, 05/06)
- CEA/DAPNIA/SPP (Saclay, France 05/06)
- Institut d’Astrophysique Spatiale (Orsay, France, 05/06)
- Institut d’Astrophysique de Paris (France 05/06)
- KICP University of Chicago (05/06)
- McGill University (Montreal, 09/06)
- Nagoya University Physics Dept (10/06)
- Nagoya University (Solar and Terrestrial Environment Laboratory, Japan, 05/06)
- Kyoto University Physics Dept (Japan, 10/06)
- Cornell University (10/06)
- University of Waterloo (10/06)

Other talks:

- Canadian Institute of Theoretical Astrophysics, University of Toronto (03/06)
- JPL Planck meeting (03/06)
- External Correlations with the CMB and Cosmology (Fermilab, IL, 05/06)

2005

Invited Seminars/Colloquia:

- ETSU Workshop, 11/05
- Invited review, Perimeter Institute, Waterloo, 05/05, Workshop on Cosmological Frontiers in Fundamental Physics
- Invited contribution, Center for Gravitational Wave Physics, Penn State, 07/05, Pulsar Timing Array – A Nanohertz Gravitational Wave Telescope
- Invited review, “Reionizing the Universe”, Groningen, 07/05
- Invited contribution, École Chalonge, Observatoire de Paris, 06/05
- Invited contribution, PASCOS 05, Gyeongju, Korea, 05/05
- École Chalonge, Observatoire de Paris, The Primordial Universe, 12/04
- IAS Gravitational lensing workshop, 11/04
- UT Austin invited colloquium, 10/04
- Dark 2004 invited contribution, Texas A&M, 10/04

2003

- Aspen workshop, CMB after WMAP, 08/03
- Princeton–Oxford Meeting, 02/03

2002

- Princeton gravity group seminar
- CMBNet kick-off meeting, Oxford
- Oxford Nuclear and Astrophysics Laboratory journal club
- Oxford Nuclear and Astrophysics Laboratory seminar
- IoA, Cambridge, group seminar

2001

- UC Berkeley, lunch seminar
- UC Davis, cosmology group seminar
- Caltech Observational Cosmology, group seminar
- CMBNet meeting, Rome
- SZ workshop, Toulouse

HOBBIES

Photography, Long distance triathlon, Aerobatic flying, Soaring