

CURRICULUM VITAE

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Education:

1987: Ph.D. Physics, Massachusetts Institute of Technology, Cambridge, MA Thesis title: *Strange Stars*; Advisor: E. Farhi

1981: B.S. Physics, Pontíficia Universidade Católica, Rio de Janeiro, Brazil.

Present Position:

2018–present: **Dean of Physical Sciences Division**, The University of Chicago.

2017–present: Albert A. Michelson Distinguished Service Professor in the Department of Astronomy and Astrophysics and the College, The University of Chicago.

2006–present: Professor, Kavli Institute of Cosmological Physics, and Enrico Fermi Institute, at The University of Chicago

Previous Positions:

2012–2017: Chair of the Department of Astronomy and Astrophysics, The University of Chicago.

2013–2016: Homer J. Livingston Professor in the Department of Astronomy and Astrophysics and the College, The University of Chicago.

2007: Visiting Professor, Chaire d'Excellence Award, Laboratoire d'AstroParticule et Cosmologie (APC), Université de Paris 7-Denis Diderot.

2003–2006: Chair of the Department of Astronomy and Astrophysics, The University of Chicago.

2002–2006: Associate Professor, Department of Astronomy and Astrophysics, Kavli Institute of Cosmological Physics, Enrico Fermi Institute, and the College, at The University of Chicago

1996–2002: Assistant Professor, Department of Astronomy and Astrophysics and Enrico Fermi Institute, The University of Chicago.

1993–1996: Senior Lecturer and Academic Executive Officer, Department of Astronomy and Astrophysics; Senior Research Associate, Enrico Fermi Institute, The University of Chicago.

1990–1992: Senior Research Associate, Department of Astronomy and Astrophysics, The University of Chicago.

1987–1990 Postdoctoral Research Associate, Theoretical Astrophysics Group, Fermi National Accelerator Laboratory.

Professional Leadership, Service, & Honors:

Research Interests:

Astroparticle Physics and Cosmology.

Research Leadership:

2017-present: **PI of POEMMA** (Probe of Extreme Multi-Messenger Astrophysics) NASA conceptual study of probe class mission (up to 1B\$) to observe the highest energy cosmic rays and neutrinos to be presented to the Astronomy and Astrophysics 2020 Decadal Survey.

2017-present: **PI of EUSO-SPB2** (Extreme Universe Space Observatory on a Super Pressure Balloon 2) NASA balloon mission to be constructed and fly by 2022 as pathfinder for POEMMA.

2014-2018: **PI of EUSO-SPB1** (Extreme Universe Space Observatory on a Super Pressure Balloon 1) NASA balloon mission - short flight April 2017.

2012-present: **US PI of JEM-EUSO** (Extreme Universe Space Observatory on-board of the Japanese Experiment Module of the International Space Station) mission - an international collaboration involving 16 countries to discover the origin of the highest energy cosmic rays.

2005-2010: Led the science case, site selection, design, and proposal process for the Northern site of the **Pierre Auger Observatory**.

1996-2019: Leadership of the science for the 3,000 km² Pierre Auger Observatory in Malargue, Argentina, built and operated by a 19 country collaboration.

1985-present: **theoretical contributions** to particle physics and astrophysics. Significant contributions to the study of the structure of neutron stars, inflationary theory, cosmic magnetic fields, the nature of the dark matter, and the origin of the highest energy cosmic particles: cosmic rays, gamma-rays, and neutrinos.

Honors & Awards:

2022: Elected Member of the **Brazilian Academy of Sciences**

2021: Elected Member of the **National Academy of Sciences**

2021: Elected Member of the **American Academy of Arts and Sciences**

2016: **Albert A. Michelson Distinguished Service Professor** in the Department of Astronomy and Astrophysics and the College, The University of Chicago.

2014-2015 **Faculty Award for Excellence in Graduate Teaching and Mentoring**, The University of Chicago.

2013-2016: **Homer J. Livingston Professor** in the Department of Astronomy and Astrophysics and the College, The University of Chicago.

2013: **Hess Lecturer** of the 33rd International Cosmic Ray Conference.

2012: Elected Fellow of the **American Association for the Advancement of Science**.

2011: Awarded the Llewellyn John and Harriet Manchester **Quantrell Award for Excellence in Undergraduate Teaching**, The University of Chicago, June 11, 2011.

2006: Awarded **Chaire d'Excellence** of the French Agence Nationale de la Recherche.

2005: Speaker Award of the Particles and Nuclei International Conference (PANIC 05).

2004: Convocation Speaker for the **478th Convocation** at the University of Chicago.
2001: Elected **Fellow of the American Physical Society** (APS).
1991: Arthur H. Compton Lecturer, Enrico Fermi Institute, The University of Chicago.

University Leadership:

2018–present: Dean of Physical Sciences Division, The University of Chicago.
2017-2018: elected member of the the Council of the University Senate (resigned due to deanship).
2016-2018: Chair of the Smart Museum University Advisory Committee.
2017: established the Astronomy and Astrophysics Major at the University of Chicago.
2016: established the Astronomy and Astrophysics Minor at the University of Chicago.
2016-2018: Member of the University’s Arts Steering Committee.
2015-2018: Member of the University’s Public Art Committee.
2014-2017: Member of the University’s Diversity Advisory Council.
2014-2015: Member of the President’s Committee on Freedom of Expression.
2014-2015: Member of the Provost Committee on Latin America to plan a strategy for the University’s presence in Latin America.
2011-2017: Member of the UChicago Paris Faculty Steering Committee
2011-2014: Chair of the Women in the Physical Sciences Committee of the Physical Sciences Division.
2010-2014: Physical Sciences Division representative on the UChicago FACCTS (France and Chicago Collaborating in the Sciences) program.
2008-2011: Member of the Provost Women Leadership Council that produced the Report on the Status of Academic Women at the University of Chicago (February 2012).
2007-2008: Initiated the Astronomy Core for the University of Chicago, Paris Center.

National Leadership:

2021-present: Chair of the Selection Advisory Board for the Gruber Prize in Cosmology.
2019-2021: Member of the Selection Advisory Board for the Gruber Prize in Cosmology.
2018-present: Trustee of the Toyota Technological Institute of Chicago.
2018-present: Member of the Argonne National Laboratory Board of Governors.
2020: Member of Decadal Evaluation of the WM Keck Foundation.
2019-2021: Member of NAS Astro2020 panel on An Enabling Foundation for Research.
2017-2018: Member of Committee on Astronomy and Astrophysics (CAA) of the National Academies of Sciences, Engineering, and Medicine.
2017: Member of Academic Program Review of the Boston University Department of Astronomy.
2013-2018: Member Dean’s Advisory Committee for the Laboratory for Nuclear Science of the Massachusetts Institute of Technology (MIT).
2016: expert witness to the Joint Space Subcommittee and Research and Technology Subcommittee Hearing on Astronomy, Astrophysics, and Astrobiology, of the 114th US Congress, July 12, 2016
2016: Chair of the Bethe Prize Committee, American Physical Society.

2015-2016: Chair of the Astronomy & Astrophysics Advisory Committee, a FACA committee overseeing inter-agency collaboration of NASA, NSF, and DOE.

2015-2016: Member of the Midterm Astronomy and Astrophysics Assessment Committee of the National Research Council.

2015: Member of the Bethe Prize Committee, American Physical Society.

2014-2015: Vice-Chair of the Astronomy & Astrophysics Advisory Committee (advises NASA, NSF, and DOE).

2013-2016: Member of the Astronomy & Astrophysics Advisory Committee (advises NASA, NSF, and DOE).

2013: Chair, Division of Astrophysics, American Physical Society (Vice-Chair 2011, Chair-Elect 2012, Past-Chair 2014).

2012-2015: Executive Committee Member of NASA Physics of the Cosmos Program Analysis Group (PhysPAG).

2012-2016: Editorial Committee Member for Annual Reviews of Nuclear and Particle Science.

2012: NSF PHYS Committee of Visitors, Chair of Particle Astrophysics.

2011-2012: Member of the Portfolio Review Committee of the NSF Division of Astronomical Sciences; report on Advancing Astronomy in the Coming Decade: Opportunities and Challenges.

2012: Elected Member of the Electorate Nominating Committee of the American Association for the Advancement of Science.

2011-2013: Member of the Kavli Institute for Theoretical Physics (KITP) Advisory Board.

2010: Chair of the Bethe Prize Committee, American Physical Society.

2009-2010: Member of the Astronomy and Astrophysics Decadal Survey (Astro 2010), Panel on Particle Astrophysics and Gravitation (PAG), by the National Research Council of the National Academy of Sciences.

2009-2010: Chair, Nominating Committee, American Physical Society.

2009: Member of Committee of Visitors, National Science Foundation.

2008: Chair-elect, Nominating Committee, American Physical Society.

2007-2010: Elected Member, Executive Committee of the High Energy Astrophysics Division, American Astronomical Society.

2007: Elected Chair of Nominating Committee, American Physical Society.

2006-2009: Member of HEPAP: High Energy Physics Advisory Panel (advises DOE and NSF).

2004-2010: Member of the Universities Space Research Association (USRA) science council.

2003-2007: editorial committee of the Annual Reviews of Nuclear and Particle Science

2003-2006: Member of the AAAC: Astronomy & Astrophysics Advisory Committee (advises NASA, NSF, and DOE).

2003-2004: Chair of the Tinsley Prize Committee, American Astronomical Society.

2002-2007: Trustee of the Aspen Center for Physics.

2002-2003: Member Neutrino Facilities Assessment Committee, National Research Council.

2002-2004: Member of the Maria Goeppert-Mayer Award Committee, APS. 2001 - 2004: Corporate Secretary of the Aspen Center for Physics.

2001-2003: Member of the AAS Tinsley Prize Committee.
 1999-2001: Assist. Corporate Secretary of the Aspen Center for Physics.
 1998-2000: Scientific Secretary of the Aspen Center for Physics.
 1997-2001: Member of NSAC: Nuclear Science Advisory Board (advises DOE and NSF).
 1995-2009: Member of the Aspen Center for Physics.
 1992-1994: Secretary-Treasurer of the Division of Astrophysics, American Physical Society.
 1992-present: Member of the American Astronomical Society.

International Leadership:

2021: Member of the DESY (Deutsches Elektronen-Synchrotron) Scientific Council, Germany
 2020: Member of the University of Hong Kong Science Review Panel.
 2018: Member of Scientific Advisory Board of the Institute of Space Studies of Catalonia (IEEC), Barcelona, Spain.
 2014-2017: Member of the Scientific Advisory Board of Max-Planck-Institute for Nuclear Physics in Heidelberg (MPIK).
 2014-2016: Member of the AstroParticle Physics International Committee (APPIC) of the International Union of Pure and Applied Physics (IUPAP) Working Group 10.
 2003-2018: Editor of the Journal of Cosmology and Astroparticle Physics, JCAP.
 2011-2013: Member of the Scientific Standing Committee of the Kilometer Cube Neutrino Telescope (KM3NeT), the European Consortium to build a next generation High-Energy Neutrino Telescope.
 2004-2011: Member of the Particle and Nuclear Astrophysics and Gravitation International Committee (PANAGIC) of IUPAP.
 2004: President of the external evaluation committee to establish the Laboratoire d'Astroparticule et Cosmologie at Universite de Paris 7, Denis-Diderot, France.
 2001-2004: Member of the IAU Working Group on Astroparticle Physics.
 1999-2001: Nominating Committee Member, Forum of International Physics, APS.
 1993-1997: Executive Committee Member, Forum of International Physics, APS.
 1992-1996: Member of the Committee of International Scientific Affairs, APS.

Invited Speaker at Conferences:

- *Space Observatories for Ultrahigh Energy Astroparticles*, invited speaker at the Latin American Symposium on High Energy Physics, November 12, 2021, online, hosted by ICTP South American Institute for Fundamental Research .
- *Space Observatories for the Highest Energy Nuclei and Neutrinos*, invited speaker at the XLIV Brazilian Workshop on Nuclear Physics, November 11, 2021, online, hosted by Sociedade Brasileira de Fisica.
- *The POEMMA (Probe Of Extreme Multi-Messenger Astrophysics) mission*, invited talk, 43rd COSPAR Scientific Assembly, 2 February 2021, online hosted in Sydney, Australia.
- *POEMMA and EUSO-SPB2 science and status in the US*, the 28th JEM-EUSO Collaboration meeting, 30 Nov- 4 December 2020, online hosted in Rome, Italy

- *Space Observatories of the Highest Energy Particles: POEMMA and EUSO-SPB*, 2020 Meeting of the Cosmic Ray Division, Mexican Physical Society, 23 Nov 2020, online hosted in Mexico City, Mexico.
- *Future prospects for understanding the Astrophysical Energy Extreme*, online presentation at conference entitled "Understanding the Most Energetic Cosmic Accelerators: Advances in Theory and Simulation", Princeton Center for Theoretical Science, 28 Oct 2020, online hosted at Princeton, NJ,
- *POEMMA and EUSO-SPB2 science and status in the US*, multiple online presentations during the 27th JEM-EUSO Collaboration meeting, 15-19 June 2020, Skobeltsyn Institute of Nuclear Physics of Lomonosov Moscow State University, Moscow, Russia.
- *POEMMA: Probe of Extreme Multi-Messenger Astrophysics*, NextGAPES 2019 (Next Generation of AstroParticle Experiments in Space), 22 June 2019, Moscow, Russia
- *POEMMA: Probe of Extreme Multi-Messenger Astrophysics*, Space Astrophysics Landscape meeting, 2 April 2019, Potomac, Maryland.
- *POEMMA: Probe Of Multi-Messenger Astrophysics*, 42nd COSPAR Scientific Assembly, Pasadena, CA, 21 July 2018.
- *The space mission POEMMA: Probe of Extreme Multi-Messenger Astrophysics*, XVII Vulcano Workshop, Vulcano, Sicily, Italy, 26 May 2018.
- *POEMMA: Probe Of Multi-Messenger Astrophysics*, Gran-Sasso Science Institute, SiPM meeting, l'Aquila, Italy, 8 May 2018.
- *Future of very high energy cosmic rays*, at the Conference in honor of Pierre Bintruy: From theory to strategy of discovery, Paris, France, 4 May 2018.
- *POEMMA: Probe Of Multi-Messenger Astrophysics*, invited talk at AMS Days at La Palma, La Palma, Spain, 12 April 2018.
- *The Earth as a Sub-Atomic Particle Detector*, Montgomery Place, Chicago, IL, 30 March 2018.
- *POEMMA: Probe Of Multi-Messenger Astrophysics*, High Energy Astrophysics in the 2020's and Beyond, HEAD Meeting, Chicago, IL, 20 March 2018.
- *Cosmic Particles in the Multi-Messengers Era*, invited highlight talk at the High Energy Astrophysics in the 2020's and Beyond, HEAD Meeting, Chicago, IL, 19 March 2018.
- *Inspired by Many Dimensions*, Global Marathon, online eDiscovery, "Breaking through; it's women's work", 7 March 2018.
- *The Science of Future Astroparticle Physics Projects*, MIAPP workshop coordinator, Garching bei Munchen, Germany, 5 March 2018.
- *Inspired by Many Dimensions*, APS Conferences for Undergraduate Women in Physics (CUWiP) meeting, Kansas University, Lawrence, KS, 13 January 2018.
- *POEMMA: Probe Of Multi-Messenger Astrophysics*, AAS meeting, Washington, DC, 9 January 2018.
- *POEMMA and EUSO-SPB2*, JEM-EUSO Collaboration meeting, RIKEN, Wako-shi, Japan, 4 December 2017.
- *Space Probes of the Highest Energy Particles: POEMMA and EUSO-SPB*, colloquium at Marshall Space Flight Center, Huntsville, AL, 28 November 2017.

- *The Extreme Energy Cosmic Frontier*, colloquium at Johns Hopkins University, Baltimore, MD, 28 November 2017.
- *Ultra-High Energy Cosmic Rays*, invited review talk, JSI Workshop, Annapolis, MD, 6 November 2017.
- *POEMMA: The Probe Of Multi-Messenger Astrophysics*, JEM-EUSO Collaboration meeting, University of Torino, Torino, Italy, 16 October 2017.
- *Astroparticle Physics and Nelson Coming of Age*, at the "Quantum cosmology and bouncing models" Meeting, CBPF, Rio de Janeiro, Brazil, 29 September 2017.
- *Cosmic Rays and Cosmology*, 21st annual International Conference on Particle Physics and Cosmology, APC, Paris, France, 31 August 2017.
- *Towards Space Probes of Astrophysical and Cosmogenic Neutrinos*, TeVPA, Ohio State University, Columbus, OH, 11 August 2017.
- *POEMMA: The Probe Of Multi-Messenger Astrophysics*, ICRC 2017, Busan, Korea, 18 July 2017.
- *POEMMA Science*, JEM-EUSO Collaboration, The University of Chicago, Chicago, IL, 23 June 2017.
- *JEM-EUSO in the USA: EUSO-SPB to POEMMA*, JEM-EUSO Collaboration, The University of Chicago, Chicago, IL, 19 June 2017.
- *The Probe Of Multi-Messenger Astrophysics (POEMMA)*, webinar, LineA (Laboratório Interinstitucional de e-Astronomia), 8 June 2017.
- *The Probe Of Multi-Messenger Astrophysics (POEMMA)*, colloquium at Laboratoire Astroparticule et Cosmologie (APC), Paris, France, 24 May 2017.
- *Panel on Arts and Science*, Kennedy Center Arts Summit, DC, 5 May 2017.
- *EUSO-SPB* visit of Chargé d'Affaires Candy Green, U.S. Embassy, Wanaka Airport, Wanaka, New Zealand, 23 March 2017.
- *O céu não é o limite: Astrofísica, interdisciplinaridade e o Brasil*, Brazilian Graduate Student Conference (BRASCON), Los Angeles, CA, 11 March 2017.
- *Evolution and Next Generation of Large Cosmic-Ray Experiments*, invited speaker at the APS meeting, Salt Lake City, 19 April 2016.
- *The Highest Energy Particles in Nature* invited speaker at AAAS 2016 Annual Meeting, symposium on Astroparticle Physics: Unravelling Mysteries of the Universe, Washington, DC, 13 February 2016.
- *The Highest Energy Cosmic Particles*, AMS Days at CERN, Geneva, Switzerland, April 15-17, 2015.
- *News from the Extreme Energy Cliff*, JSI workshop, Annapolis, MD, November 2014.
- *The JEM-EUSO Mission*, invited talk at *COSPAR 2014*, August 2014, Moscow, Russia.
- *Space Observatories for Extreme Cosmic Particles*, invited talk at *COSPAR 2014*, August 2014, Moscow, Russia.
- *JEM-EUSO and the future of UHECRs*, invited talk at the *Astroparticle Physics 2014, a joint TeVPA/IDM meeting*, June 2014, Amsterdam, Netherlands.
- *New Results on the Highest Energy Cosmic Rays*, AAAS Annual Meeting, February 2014, Chicago, IL.

- *What are the Sources of UHECRs?*, invited lecture at the Institute of Physics, Topical Research Meeting *The Violent Universe*, 1 November 2013, London, UK.
- *Mistérios Cósmicos: o Universo escuro e as Partículas mais energéticas*, Primeiro Simpósio da Comunidade Científica Brasileira na Nova Inglaterra, 5 October 2013, MIT, Cambridge, MA
- *Cosmic Particles*, invited lecture at *International Workshop on Astronomy and Relativistic Astrophysics*, 30 September 2013, CBPF, Rio de Janeiro, Brazil.
- *Where do UHECRs come from?*, invited lecture at *International Workshop on Astronomy and Relativistic Astrophysics*, 30 September 2013, CBPF, Rio de Janeiro, Brazil.
- *Where do UHECRs come from?*, Aspen Center for Physics Workshop, 9 September 2013, Aspen, CO.
- *High Energy neutrinos?*, Aspen Center for Physics Workshop, 12 September 2013, Aspen, CO.
- *Where do UHECRs come from?*, KIPAC@10 Big Questions in Particle Astrophysics and Cosmology, 3 September 2013, SLAC, Stanford, CA.
- *Extreme Energy Particles with JEM-EUSO*, TeV Particle Astrophysics, 27 August 2013, Univ. California Irvine, CA.
- *The Bright Side of the Cosmic Frontier: High Energy Cosmic Particles*, DPF Meeting, 14 August 2013, Univ. California Santa Cruz, CA.
- *High Energy Physics and Astrophysics, Snowmass on the Mississippi*, 5 August 2013, Univ. of Minnesota, Minneapolis, MN.
- *High Energy Cosmic Particles*, Snowmass on the Mississippi, 3 August 2013, Univ. of Minnesota, Minneapolis, MN.
- *Cosmic Particles*, SLAC Summer Institute, Stanford, CA.
- Hess Lecture of the 33rd International Cosmic Ray Conference 2013, *Mistérios Cósmicos: o Universo escuro e as Partículas mais energéticas*, 8 July 2013, Rio de Janeiro, Brazil.
- JEM-EUSO Collaboration Meeting invited talk on *Current Status of UHECR Science*, , 17 June 2013, Tenerife, Spain.
- CTA-Link Symposium, invited talk on *Overview of Cosmic Ray Research*, 19-21 November 2012, Buenos Aires, Argentina.
- SpacePart12, 4th International Conference on Particle and Fundamental Physics in Space, invited talk on *Cosmic Rays of Extreme Energies*, 5-7 November 2012, CERN, Geneva, Switzerland.
- Nature's Particle Accelerators, Joint Space Science Institute Symposium, invited talk on *Cosmic ray observations challenge particle acceleration mechanisms*, 22-25 October 2012, Annapolis, MD.
- PhysPAG meeting, NASA Physics of the Cosmos, invited talk on *Space Opportunities for Cosmic Ray Science*, August 14-16, 2012, Washington, DC.
- International Summer School of AstroParticle Physics (ISAPP 2012), lectures on *Multi-messenger prospective*, 10-11 July 2012, Paris, France.
- Centenary Symposium on Discovery of Cosmic Rays, CR2012, invited talk on *Acceleration and Propagation of UHECR*, 26-28 June 2012, Denver, CO.
- American Physical Society (APS) April meeting, *The JEM-EUSO Mission* contributed

and *Future Directions for Extra-Galactic Cosmic Ray Physics* invited talk, March 31 to April 3, 2012, Atlanta, GA.

- II Astroparticle Physics Workshop, invited talk on *Plausible sources of ultrahigh energy cosmic rays*, 5 March 2012, So Carlos, SP, Brazil.
- International Symposium on Future Directions in UHECR Physics, (UHECR 2012), *Theory and phenomenology: summary and outlook*, invited summary talk, 16 February 2012, CERN, Geneva, Switzerland.
- 490th Heraeus Seminar: Radio Detection in Astroparticle Physics, October 2011, Physikzentrum Bad Honnef, Germany
- Topics in Astroparticle and Underground Physics (TAUP), Munchen, Germany, September 2011, invited talk.
- 32th International Cosmic Rays Conference (ICRC) Beijing, August 2011, highlight invited talk.
- Workshop on Primordial Magnetism, Arizona State University, Tempe, AZ, Mar-Apr 2011 *Extragalactic Magnetic Fields & Ultrahigh Energy Cosmic Rays*.
- Symposium on Experiments on the Cosmic Frontier, March 2011, Fermilab, IL, organized and chaired the panel on *Cosmic Particles*.
- The Ins and Outs of Black Holes, November 2010, Annapolis, Maryland, *Do Black Holes Accelerate Particles to the Highest Energies?*
- Neutrino Oscillations Workshop, NOW 2010, September 2010, Otranto, Italy, *UHECR and Neutrinos*.
- XVI ISHECRI (International Symposium on High Energy Cosmic Ray Interactions), June 28-July 2, 2010, Fermilab, IL, USA, *Theoretical Summary*.
- JEM-EUSO special Symposium, University of Alabama in Huntsville, Al; June 25, 2010, *Challenges at Extreme Energies*.
- CCAPP Anisotropies Workshop, Ohio State University, Columbus, OH, 23 June 2010; *Anisotropies at the Highest Energies*.
- Bartol Workshop on Ultra-high energy cosmic ray interactions and the large scale structure of the Universe, Bartol Institute, MD, 10 December 2009, *Auger North*.
- IAU 2009, August 2009, Rio de Janeiro, Brazil; *The Future of Cosmic Ray Astronomy*.
- DPF09, July 2009, Detroit, USA; *Cosmic Particles at the HE Frontier: Cosmic Rays, Gamma-rays, & Neutrinos*.
- TeV Particle Astrophysics 2009, July 2009, Stanford, USA; *New results from ultra-high energy frontier*.
- ICHEP08, August 2008, Philadelphia, USA; *Results from Pierre Auger Observatory, High-energy Gamma-ray Astronomy and Neutrino Astronomy*.
- Symmetries and Phases in the Universe Symposium, Excellence Cluster Universe, June 2008, Kloster Irsee, Germany; *The origin of the highest energy particles*.
- 211th Meeting of the American Astronomical Society, January 2008, Austin, TX: *Next Generation Observatories for Ultra High Energy Cosmic Rays*.
- TeV Particle Astrophysics 2007, 27-31 August 2007, Venice, Italy: *Latest results from the Auger Observatory*.

- Workshop on Future prospects of Ultra-High Energy Cosmic Rays, 23 May 2007, APC, Paris: *Auger North*.
- Astrophysics Enabled By the Return to the Moon, November 28 - 30, 2006, Space Telescope Science Institute, Baltimore, MD: *High Energy Cosmic Rays*.
- Joint Meeting of Pacific Region Particle Physics Communities, November 2006, Honolulu, Hawaii, plenary talk: *A New Era in Particle Astrophysics*.
- 9th Meeting of the AAS High Energy Astrophysics Division (HEAD), October 2006, San Francisco, California: *A New Era of UHE Cosmic Ray and Neutrino Astrophysics*.
- XXVII Encontro Nacional de Física de Partículas e Campos, September 24-28, 2006, Aguas de Lindoia, SP, Brazil: *Astroparticle Physics*.
- International Workshop on *The UHE Universe: a vision for the next decade*, June 19-21, 2006, Monteporzio Catone, Frascati, Italy: *UHECR research in 2015-2025: Auger North and beyond*.
- 14th International Conference on Supersymmetry and the Unification of Fundamental Interactions, 12-17 June, 2006, Irvine, California: *Probing above the Terascale with UHE Cosmic Rays and Neutrinos*.
- XXII International Conference on Neutrino Physics and Astrophysics, June 13-19, 2006, Santa Fe, New Mexico: *The highest energy cosmic rays*.
- Cosmic Ray International Seminar (CRIS 2006): Ultra-High Energy Cosmic Rays: Status and Perspectives, May 29 - June 2, 2006, Catania, Italy: *UHE neutrinos and the composition of UHECRs*.
- Scientific Inauguration of APC (Astroparticule et Cosmologie) Laboratory, 5 May 2006, Paris, France: *L'Universite de Chicago et l'astroparticule*.
- 5th International Conference on Information Processing in Sensor Networks (IPSN 2006), April 19-21, 2006, Nashville, TN, USA - keynote speaker: *Probing The Mystery of the Highest Energy Cosmic Particles With a Large Distributed Observatory*.
- APS April Meeting 2006, April 22-25, 2006, Dallas, Texas: *When Particle Physics Confronts Cosmic Ray Data*.
- The Fourth International School on Field Theory and Gravitation, April 2006, Friburgo, Brazil: *The Mystery of Ultra-High Energy Cosmic Rays*.
- PANIC 05: Particles and Nuclei International Conference, October 24-28, 2005, Santa Fe, NM: *Astrophysics: New Cosmic Rays at the Highest Energies*.
- The Invisible Universe: Einstein's Legacy, Oct. 7, 2005, University of Michigan Astronomy distinguished speaker series, Ann Arbor, MI: *Mysteries of the Extreme Universe*.
- The 59th Yamada conference, Inflating horizon of particle astrophysics and cosmology, June 20 - 24, 2005, The University of Tokyo, Tokyo, Japan: *Deciphering the Extreme Universe with Ultra High Energy Cosmic Rays*.
- Phenomenology 2005 Symposium (PHENO 05), World Year of Phenomenology, University of Wisconsin-Madison, May 2-4, 2005, Madison, WI: *The Highest Energy Cosmic Rays*.
- IoP2005: Physics, a century after Einstein, April 10 - 14, 2005 University of Warwick, UK: *Testing Relativity with the Highest Energy Cosmic Particles*.
- The 3rd CERN - CLAF School of High-Energy Physics, 27 February - 12 March 2005,

Malarge, Argentina: *Ultra High Energy Cosmic Ray Theory*.

- International workshop on Magnetic Fields in the Universe: from Laboratory and Stars to Primordial Structures, November 28 - December 3, 2004, Angra dos Reis, Brazil: *Magnetic fields and ultra high energy cosmic rays*.
- International Conference on Cosmic Rays and Magnetic Fields in Large Scale Structure (3rd Korean Astrophysics Workshop), 16-20, August, 2004, Pusan National University, Busan, Korea: *Ultra High Energy Cosmic Rays*.
- 5th Rencontres du Vietnam, Particle Physics and Astrophysics, August 5 to August 11, 2004, Hanoi, Vietnam: *The New Physics of the Universe*.
- Gamma04, International Symposium on High Energy Gamma-Ray Astronomy, July 26-30, 2004, Heidelberg, Germany: *Highest energy cosmic ray*.
- 3rd International Workshop on Ultra-High Energy Cosmic Rays, 22 - 23 July 2004, University of Leeds, UK: *What we can learn from GZK Feature*.
- The Heraeus International School on *Physics with Cosmic Accelerators*, July 2004, at Bad Honnef, Germany: lectures on *The Early Universe*.
- 28th Johns Hopkins Workshop on Current Problems in Particle Theory: Hyperspace, Superspace, Theory Space and Outer Space, June 5-8, 2004 at the Johns Hopkins University, Baltimore, Maryland: *Deciphering the Extreme Universe*.
- CRIS 2004 - Cosmic Ray International Seminar - GZK and Surroundings, Catania, Italy, May 31 - June 4 2004, *UHE Cosmic Rays and Neutrinos*.
- Invited talk at Les Rencontres de Physique de la Vallée d'Aoste: Results and Perspectives in Particle Physics, February 29-March 6, 2004, La Thuile, Aosta Valley, Italy: *The Status of Ultra-High Energy Cosmic Ray Studies*.
- Invited talk at SpacePart 03, December 2003, Washington, DC: *Review of EHECRs Messengers of the Extreme Universe*.
- Invited talk at Cosmic Magnetic Fields, workshop of the Center for Magnetic Self-Organization in Astrophysical and Laboratory Plasmas: *Cosmological Magnetic Fields*.
- Kavli-CERCA Conference on the Future of Cosmology, Oct 10, 2003 Case Western Reserve University, Cleveland OH: *Ultra High Energy Cosmic Rays*.
- ICRC2003, The 28th International Cosmic Ray Conference, July 31- Aug 7, 2003, Tsukuba, Japan: *Rapporteur of Ultra High Energy Cosmic Rays*.
- Heinz R. Pagels Memorial Lectures, July 9, 2003, Aspen, CO: *Messengers of the Extreme Universe*.
- 2nd VERITAS Symposium on TeV Astrophysics, Adler Planetarium, April 24-26, 2003, Chicago, IL: *Lighting up the Dark Matter*.
- Annual Meeting of the American Association for the Advancement of Science, February 13-18, 2003, Denver, CO: *The Highest Energy Cosmic Rays*.
- 201st Meeting of the American Astronomical Society, January 5-9, 2003, Seattle, WA: *Puzzling Cosmic Rays at the Highest Energies*.
- XXI Texas Symposium on Relativistic Astrophysics, December 9-13, 2002, Florence, Italy: *Messengers of the Extreme Universe*.
- International Workshop on Extremely High Energy Cosmic Rays, November 5-6, 2002, Riken, Japan: *GZK measurement or Super-GZK discovery?*

- Pierre Auger Event Reconstruction Workshop, Center for Cosmological Physics, October 2-5, 2002, Chicago, IL: *Ultra High Energy Cosmic Rays: Theoretical Perspective(s)*.
- Frontier Objects in Astrophysics and Particle Physics, May 20-25, 2002, Vulcano, Italy: *Theories of Ultra High Energy Cosmic Rays*.
- Topics in Astroparticle and Underground Physics, TAUP 2001, September 8-12, 2001, Gran Sasso, Italy: *The Future of Ultra High Energy Cosmic Rays*.
- The XIIIth Rencontres de Blois, Frontiers of the Universe, June 17-23, 2001, Blois, France: *Cosmic Scale Magnetic Fields*.
- International Meeting on Extremely High Energy Cosmic, ICRR / University of Tokyo, March 2001, Tokyo, Japan: *Origin of Super GZK particles*.
- XXth Rencontres de Moriond on Very High Energy Phenomena in the Universe, January 20-17, 2001, Les Arcs, France: *UHECR from the galaxy to the beginning of the universe*.
- Particle Physics at the Millennium, 2001 Aspen Winter Conference on Particle Physics, January 7-13, 2001, Aspen, CO: *The Pierre Auger Project*.
- 7th Taipei Astrophysics Workshop on Cosmic Rays in the Universe, National Central University, October 18-20, 2000, Chung-Li, Taiwan: *The GZK feature in our neighborhood and plausible sources for UHECRs*.
- 6th International Workshop on Relativistic Aspects of Nuclear Physics (RANP2000), Tabatinga, October 16-21, 2000, SP, Brazil: *The Origin of the Highest Energy Cosmic Rays*.
- International Workshop on Observing Ultra High Energy Cosmic Rays From Space and Earth, Metepec, August, 9-12, 2000 Puebla, Mexico: *From the Galaxy to the Edge of the Universe: Plausible Sources of UHECRs*.
- XI International Symposium on Very High Energy Cosmic Ray Interactions, *The Gleb Wataghin Centennial*, July 17-20, 2000, Campinas, Brazil, *Theoretical Challenges in Ultra-High Energy Cosmic Ray Physics*.
- The American Physical Society Meeting, April 29, 2000, Long Beach, CA: *Cosmological Magnetic Fields*.
- International Summer School on Gravitational Waves, September 1999, Urbino, Italy: *The Mystery of Ultra-High Energy Cosmic Rays*.
- German-American Young Scholars' Institute on Astroparticle Physics, September 1999, MPI Garching & Schloss Ringberg, Germany, lectures on: *Ultra High Energy Cosmic Rays*.
- 195th IAU Symposium on Highly Energetic Physical Processes, July 1999, Bozeman, MO: *Ultra High Energy Cosmic Ray Accelerators*.
- 194th Meeting of the American Astronomical Society - The Centennial Meeting, June 1999, Chicago, IL: *The Highest Energy Cosmic Rays*.
- Inner Space/Outer Space II - The David N. Schramm Memorial Symposium, May 1999, Chicago, IL: *Ultra High Energy Cosmic Rays: Theory*.
- The 3rd RESCEU (Research Center for the Early Universe) International Symposium, University of Tokyo, November 1997, Tokyo, Japan: *Cosmological Magnetic Fields*.
- 18th Texas Symposium on High Energy Astrophysics, December 1996, Chicago, IL: *Cosmological Magnetic Fields*.

- Illinois Humanistic Society Meeting on Birth and Death, December 1996, Chicago, IL: *The Birth of the Universe*.
- Baffin Island Conference on Cosmology, August 1996, Iqaluit, Canada: *Cosmological Magnetic Fields*.
- 1995 Gordon Conference on Nuclear Physics, July 1995, Tilton, NH: *Phase Transitions in the Early Universe*.
- LISHEP95, LAFEX International School on High Energy Physics, Rio de Janeiro, Brazil: *Cosmology and Particle Physics*.
- LISHEP95, Rio de Janeiro, Brazil; public lecture on: *Cosmology at the Turn of the Millennium*.
- CAM 94, September 1994, Cancun, Mexico, : *Galaxy Formation and Magnetic Fields*.
- DPF94 - Meeting of the APS Division of Particles and Fields; August 1994, Albuquerque, NM: *Cosmology at the Millennium*.
- International Symposium on Unified Symmetry in the Small and in the Large, January, 1994, Coral Gables, FL.
- Annual meeting of the Sociedade de Astronomia Brasileira (Brazilian Astronomical Society), August 1992, Caxambu, Brazil.
- International Workshop on Relativistic Aspects of Nuclear Physics, August 1991, Rio de Janeiro, Brazil.
- International Workshop on Strange Quark Matter in Physics and Astrophysics, May 1991, Aarhus, Denmark.
- XXX Cracow School of Theoretical Physics, June 1990, Zakopane, Poland.
- International Conference on Physics and Astrophysics of Quark-Gluon Plasma, Tata Institute, February 1988, Bombay, India.
- Quark Matter '87, August 1987, Schloss Nordkirchen, West Germany.
- Ettore Majorana International School of Particle Astrophysics, May 1986, Erice, Italy.

Conference and Workshop Organizer:

- *36th International Cosmic Ray Conference*, Madison, Wisconsin, USA from 24 July to 1 August 2019, member of the Local Organizing Committee (LOC).
- *The High Energy Universe: Gamma Ray, Neutrino, and Cosmic Ray Astronomy*, 26 February - 23 March 2018, Munich Institute for Astro- and Particle Physics, Garching, Germany.
- *JEM-EUSO Collaboration Meeting*, June 2017, The University of Chicago, Chicago, IL.
- *Next-Generation Techniques for Ultra-High Energy (UHE) Astroparticle Physics*, KICP workshop, February 29 - March 2, 2016, Chicago, IL
- UHECR-14, October 12-15, 2014, Springdale, Utah.
- COSMO-14, August 25-29, 2014, Chicago, IL.
- KICP Workshop on *High-Energy Messengers: Connecting the Non-thermal Extragalactic Backgrounds* June 9-11, 2014, Chicago, IL.
- 33th International Cosmic Ray Conference, July 2-9, 2013, Rio de Janeiro, Brazil.
- KICP Workshop: Imaging the Extreme Universe, May 9-10, 2013, Chicago.

- APS April meeting 2013, DAP sessions, April 13-16, Denver, CO.
- 26th Texas Symposium on Relativistic Astrophysics, December 15-20, 2012, São Paulo, Brazil.
- KICP Workshop on *The 4th Neutrino*, May 18-19, 2012, Chicago, IL.
- 9th International Conference *Identification of Dark Matter*, July 23-27, 2012, Chicago, IL
- APS April meeting 2012, March 31 to April 3 2012; Atlanta, Georgia
- US JEM-EUSO Working Group Meeting, February 22 - 24, 2012, KICP, Chicago, IL
- 12th International Conference on Topics in Astroparticle and Underground Physics (TAUP 2011), September 5-9, 2011, Munich, Germany.
- SUSY 2011, KICP day, August 30, 2011, Chicago, IL, USA.
- PANIC 2011, July 24-29, 2011, MIT, Cambridge, MA, USA.
- Experiments on the Cosmic Frontier: Astrophysical Studies of Matter, Energy, Space and Time, March 23-26, 2011, Fermilab, Batavia, IL, USA.
- TeV Particle Astrophysics 2009, July 2009, Stanford, USA.
- International Astroparticle Physics Symposium, May 2008, Golden, CO.
- TeV Particle Astrophysics 2007, August 27-31, Venice, Italy.
- Workshop on Future prospects of Ultra-High Energy Cosmic Rays, May 22-23, 2007, APC, Paris.
- The Hunt for Dark Matter, A Symposium on Collider, Direct, and Indirect Searches, May 10-12, 2007, Fermilab, IL.
- The Pierre Auger Observatory - Analysis Meeting, September 11 - 14, 2006, The University of Chicago, Chicago, IL.
- The Cronin Fest, on the occasion of James W. Cronin's 75th Birthday, September 8 -9, 2006, The University of Chicago, Chicago, IL.
- Auger North Design Workshop, August 14 - September 7, 2006, KICP, The University of Chicago, Chicago, IL.
- New Views of the Universe, Inaugural Symposium of the KICP in honor of David Schramm, December 8 - 13, 2005.
- Ninth International Conference on Topics in Astroparticle and Underground Physics, TAUP 2005, Zaragoza, September 10-14, 2005
- Ultrahigh Energy Cosmic Rays, Aspen center for Physics, August 22 - September 11, 2005
- TeV Particle Astrophysics, Fermilab, Batavia, IL, July 13-15, 2005.
- Tenth Marcel Grossmann Meeting on General Relativity Rio de Janeiro, July 20-26, 2003 - parallel session on Matter, Dark Matter, and CP violation
- IAU session on Unconventional Observing Windows for Astrophysics, XXV General Assembly, Sidney, Australia, July, 2003.
- 21th Texas Symposium on High Energy Astrophysics, Florence, Italy, December 2002.
- Pierre Auger Event Reconstruction Workshop, Center for Cosmological Physics, Chicago, IL, October 2-5, 2002.
- Aspen Winter Conference on *Ultra High Energy Particles from Space*, January 27 - February 2, 2002.

- International Workshop on Observing Ultra High Energy Cosmic Rays From Space and Earth, Metepec, Puebla, Mexico, August 2000.
- Centennial Meeting of the AAS, Chicago, 1999.
- Inner Space/Outer Space II, D.N. Schramm Symposium Fermilab, 1999.
- Pritzker Symposium & Workshop on the Status of Inflationary Cosmology, Chicago, Jan. 1999.
- 18th Texas Symposium on High Energy Astrophysics - Chicago, Dec. 1996.
- Galactic and Cosmological Magnetic Fields, Aspen Workshop, Aug. 1996.
- Nuclei in the Cosmos - Notre Dame, June 1996.
- CAM 94 - International Physics Meeting, Cancun, Mexico 1994.
- Snowmass 1994 - *Particle and Nuclear Astrophysics and Cosmology in the Next Millennium*, at Snowmass, Colorado, June 29 - July 14, 1994.
- QCD in Astrophysics - Fermilab, April 1988.

Teaching

2018 Spring (Paris Campus): PhysSci/Astro 12710-99 - Galaxies
 2017 Spring (Paris Campus): PhysSci/Astro 12620-99 - The Big Bang
 2016 Spring: Astro 31100 - High Energy Astrophysics
 2016 Spring (Paris Campus): PhysSci/Astro 12620-99 - The Big Bang
 2015 Spring (Paris Campus): PhysSci/Astro 128 - European Astronomy and Astrophysics
 2014 Spring (Paris Campus): PhysSci/Astro 128 - European Astronomy and Astrophysics
 2013 Spring (Paris Campus): PhysSci/Astro 119 - Stellar Astronomy and Astrophysics
 2012 Spring: Astro182 - the Origin and Evolution of the Universe
 2011 Fall: Astro 432 - High Energy Cosmic Particles (new graduate course)
 2011 Spring (Paris Campus): PhysSci/Astro 120 - The Origin of the Universe and How We Know
 2010 Fall: Astro182 - the Origin and Evolution of the Universe
 2010 Spring (Paris Campus): PhysSci/Astro 120 - The Origin of the Universe and How We Know
 2009 Fall: Astro 128 - European Astronomy and Astrophysics
 2009 Spring (Paris Campus): PhysSci/Astro 128 - European Astronomy and Astrophysics
 2008 Fall: Astro182 - the Origin and Evolution of the Universe
 2008 Spring (Paris Campus): PhysSci/Astro 128 - European Astronomy and Astrophysics (new course)
 2008 Winter: Astro 182 - the Origin and Evolution of the Universe
 2006 Fall: Astro 429 - Particle Astrophysics
 2005 Fall: Astro 309 - Research Project Seminar
 2005 Spring: Astro 307 - Project Preparation Seminar
 2003 Fall: Astro 309 - Research Project Seminar
 2003 Winter: Astro182 - the Origin and Evolution of the Universe
 2002 Fall: Astro 309 - Research Project Seminar
 2002 Spring: Astro 307 - Project Preparation Seminar

2001 Winter: Astro 242 - The Physics of Galaxies & the Universe
 2001 Fall: Astro 429 - Particle Astrophysics (new course)
 2000 Spring: Astro 182 - Origin and Evolution of the Universe
 2000 Spring: Astro 280 - The Physics of the Early Universe (new course)
 2000 Winter: Astro 242 - The Physics of Galaxies & the Universe (new course)
 1999 Spring: Astro 305 - Radiative Processes in Astrophysics
 1999 Winter: Astro 182 - the Origin and Evolution of the Universe
 1998 Spring: Astro 305 - Radiative Processes in Astrophysics
 1998 Winter: Astro 182 - the Origin and Evolution of the Universe (new course)
 1997 Spring: Astro 305 - Radiative Processes in Astrophysics (new course)

Post-Doctoral Supervision:

Dr. Johannes Eser, 2020-present; Postdoctoral Fellow at the University of Chicago.
 Dr. Tim Linden - faculty mentor to Einstein Fellow at the Kavli Institute for Cosmological Physics at the University of Chicago, 2013-2015; faculty at Stockholm University, 2020-present.
 Dr. Kumiko Kotera - postdoc at the University of Chicago from 2009 - 2011; present: faculty at the Institut d'Astrophysique, Paris, France.
 Dr. Benjamin Rouillé d'Orfeuil - 2007- 2009, postdoc at APC Lab (Astroparticule et Cosmologie), L'Université de Paris 7, Paris, France; then postdoc at Université d'Orsay, France.
 Dr. Nicolas Busca - 2007-2009 postdoc at APC Lab (Astroparticule et Cosmologie), L'Université de Paris 7, Paris, France; then CNRS researcher at the Laboratoire d'Astroparticule et Cosmologie, Paris 7, France.
 Dr. Vasiliki Pavlidou - KICP fellow 2005 - 2008; present: faculty at University of Crete.
 Dr. Denis Allard - postdoc 2004 - 2006; present: CNRS researcher at the APC Lab, CR2, L'Université de Paris 7, Paris, France.
 Dr. Lorenzo Cazon Boado - postdoc 2005 - 2009; then researcher at the Laboratório de Instrumentação e Física Experimental de Partículas (LIP), Lisboa, Portugal.
 Dr. Maximo Ave - Enrico Fermi Fellow and postdoc 2002 - 2009; then researcher at Universidad de Santiago de Compostela, Spain.
 Dr. Tokonatsu Yamamoto - KICP fellow and postdoc 2002 - 2007; then faculty at Konan University, Konan, Japan.
 Dr. Marco Cavaglia - postdoc visitor 2002; then faculty at University of Mississippi.
 Dr. Pasquale Blasi - postdoc from 1997 to 1999; then faculty at Arcetri Osservatorio, Firenze, Italy, present: faculty at Gran Sasso Science Institute, L'Aquila, Italy.
 Dr. Ivone Albuquerque - postdoc from 1997 to 1999; present: faculty at Universidade de São Paulo, Brazil.
 Dr. Guenter Sigl - postdoc from 1997 to 1999; present: faculty at Universität Hamburg at DESY, Germany.
 Dr. Karsten Jedamzik - postdoc visitor 1996; present: faculty at Université de Montpellier, France.
 Dr. Martin Lemoine - postdoc 1996 to 1997; present: faculty at Institut d'Astrophysique, Paris, France.

Graduate Student Supervision:

Thesis Advisor to:

Dr. Ke Fang - graduated August 2015; JSI fellow, University of Maryland and Goddard Space Flight Center; 2018, Einstein Fellow at Stanford; present: faculty at University of Wisconsin, Madison.

Dr. Tonia Venters - graduated Summer 2009; present: civil servant at Goddard Space Flight Center.

Dr. Fabian Schmidt - graduated Summer 2009; present: scientific staff member at Max-Planck-Institut für Astrophysik, Garching, Germany.

Dr. Jennifer Siegal-Gaskins - graduated Summer 2008; Einstein Fellow at Caltech; Marie Curie fellow at University of Amsterdam, Netherlands.

Dr. Nicolas Busca - graduated Fall 2006; present: CNRS researcher, Laboratoire de Astroparticule et Cosmologie, Paris 7, France.

Dr. Eun-Joo Ahn - graduated Summer 2006; present: postdoctoral fellow at Fermi National Accelerator Laboratory.

Dr. Argyro Tasitsiomi - graduated Fall 2005 - Spitzer Fellow at Princeton University 2005-2008, since 2010 Vice President at Goldman Sachs, NY.

Dr. Craig Tyler - graduated Spring 2002; present: Los Alamos National Laboratory, Los Alamos, NM, USA.

Dr. Lucia Munoz-Franco - graduated Fall 2000 - at McKinzie & Co in 2001; present: editor at Elsevier, Netherlands.

Dr. Aparna Venkatesan - graduated Winter 2000; present: faculty at the University of San Francisco.

Dr. Visnja Katalinic - graduated Summer 1999 - McKinzie & Co in 2000; Sanofi Aventis in 2008.

Co-supervised research of Graduate Students:

Ms. Rebecca Diesing - graduate student supervised by Damiano Caprioli.

Dr. Claire Guepin - graduate student at Institut d'Astrophysique, Paris, France, graduated 2019, postdoc at University of Maryland and GSFC.

Dr. Florin Ionita - graduated 2011 - postdoc in the Netherlands.

Dr. Mark Abney - graduated 1996 - faculty at the University of Chicago.

Dr. Eunjin Kim - graduated 1996 - Senior Lecturer at the University of Sheffield, England.

Dr. Baolian Cheng - graduated 1994 - staff at LANL

Dr. Lloyd Knox - graduated 1994 - faculty at University of California, Davis.

Undergraduate Supervision:

Ms. Emily Donovan - graduated 2021 - summer internship 2019

Ms. Khadijat Durojaiye - 2018-2019 (and High School senior thesis 2018)

Ms. Shoshana Chipman - graduated 2020

Mr. Jeronimo Martinez - graduated 2020

Mr. Mikhail Rezazadeh - graduated 2017
 Mr. Leo Allen - graduated 2017
 Ms. Amanda Pagul - graduated 2015, researcher at University of California, Riverside
 Ms. Jessica Avva - graduated 2015, graduate school at University of California, Berkeley
 Mr. Joshua Banks - graduated 2008, graduate school at Vanderbilt University
 Ms. Carolyn Brown - graduated 2007, graduate school at University of California, Berkeley
 Ms. Tien-Tien Yu - graduated 2007 - graduate school at University of Wisconsin-Madison
 Department of Physics
 Ms. Ami Choi - graduated Summer 2003 - graduate school at University of California, Davis.
 Mr. Sean O'Neil - graduated Summer 2000 - graduate school at University of Minnesota, Minneapolis.

Recent Research Grants:

NASA (80NSSC18K0246) *EUSO-SPB2: second generation Extreme Universe Space Observatory on a Super-Pressure Balloon*, \$ 7.743,186; from 1/11/18 to 1/10/23, **P.I.**

NASA (NNX17AJ82G S01) *POEMMA: Concept Study of the Probe Of Extreme Multi-Messenger Astrophysics*, \$ 100,000; from 2/25/13 to 2/24/18, **P.I.**

NASA (NNX13AH54G) *U.S. Participation in JEM-EUSO*, \$ 4,393,078; from 2/25/13 to 2/24/18, **P.I.**

NSF (PHY-1068696) *The Highest Energy Astroparticle Physics*, \$ 1,020,000, 08/15/11-07/31/14; **P.I.**

NSF *Physics Frontier Center at the Kavli Institute for Cosmological Physics: Pushing Cosmology to the Edge*, \$16,900,000 09/01/11- 08/31/16, Michael Turner, PI, **Co-I.**

NSF (PHY- 0758017) *The Highest Energy Cosmic Rays*, \$990,000, 05/01/08- 04/30/11; **P.I.**

NSF (DRL-0803150) *Aiming High: Probing the Mystery of Ultra-High Energy Cosmic Rays* \$74,947, 08/15/08 - 07/31/09 **P.I.**

ANR: Chaires d'Excellence Award, Agence Nationale de la Recherche, France. *AstroParticules a Ultra-Haute Energie*, 400,000 euros, 12/01/06- 11/30/09; **P.I.**

NSF (PHY-0457069) *The Highest Energy Cosmic Rays*, \$875,000, 05/01/05- 04/30/08; **P.I.**

DOE (DE-FG02-91ER40606) *Nuclear Physics and Astrophysics*, \$1,229,000. - 03/15/91-10/14/06; **P.I.**

NSF (AST-0071235) *The Origin of the Highest Energy Particles*, \$304,899, 07/15/00-06/30/05; **P.I.**

Scientific Publications:

1. *Strange Stars*, C. Alcock, E. Farhi, & A. V. Olinto, *Astrophysical Journal* 310, 261 (1986)
2. *Model for the 5 March 1979 Gamma-Ray Transient*, C. Alcock, E. Farhi, & A. V. Olinto, *Phys. Rev. Letters* 57, 2088 (1986)
3. *Strange Matter in the Universe*, A. V. Olinto, in *Gauge Theory and the Early Universe*, edited by P. Galeotti and D. Schramm, NATO Advance Study Institute, Erice, Sicily, (1986)
4. *On the Conversion of Neutron Stars to Strange Stars*, A. V. Olinto, *Phys. Letters B* 192, 71 (1987)
5. *Observation of Exotic Phases of QCD*, A. V. Olinto, in the *Proceedings of the International Conference on the Physics and Astrophysics of Quark-Gluon Plasma*, Bombay, India (1988)
6. *Composite Leptoquarks in Hadronic Colliders*, O. Eboli & A. V. Olinto, *Phys Rev D* 38, 3461 (1988)
7. *Quark Matter in Astrophysics and Cosmology*, A. V. Olinto, *Z Physik C* 38, 303 (1988)
8. *Exotic Phases of Hadronic Matter and Their Application*, C. Alcock & A. V. Olinto, *Ann. Rev. Nuc. Part. Phys.* 38, 161 (1988)
9. *Evaporation of Strange Matter (and Similar Condensed Phases) at High Temperature*, C. Alcock & A. V. Olinto, *Phys. Rev. D* 39, 1233 (1989)
10. *Is the Sub-millisecond Pulsar Strange?*, J. Frieman & A. V. Olinto, *Nature* 341, 633 (1989)
11. *Cosmic Evolution of Non-topological Solitons*, J. Frieman, A. V. Olinto, M. Gleiser, & C. Alcock, *Phys. Rev. D* 40, 3241 (1989)
12. *Neutron Stars, Strange Stars, and SN1987A*, A. V. Olinto, in the *Proceedings of the XXX Cracow School of Theoretical Physics*, Zakopane, Poland, (1990)
13. *Natural Inflation with Pseudo-Nambu-Goldstone Bosons*, K. Freese, J. Frieman, & A. V. Olinto, *Phys. Rev. Letters* 65, 3233 (1990)
14. *Converting Neutron Stars to Strange Stars*, A. V. Olinto, *Nuclear Phys. B (Proc. Supp.)* 24B, 103 (1991)
15. *The Physics of Strange Matter*, A. V. Olinto, in the *Proceedings of the International Workshop on Relativistic Aspects of Nuclear Physics*, Rio de Janeiro, Brazil (1991)
16. *Dibaryons in Neutron Stars*, P. Haensel, J. Frieman, & A. V. Olinto, *Fermilab preprint Pub-91/176-A* (1991)
17. *Natural Inflation: Models, Constraints, and Large Scale Structure*, F. Adams, J. R. Bond, K. Freese, J. Frieman, & A. V. Olinto, *Phys. Rev. D* 47, 426 (1993)

18. *Initial Conditions for Natural Inflation*, L. Knox & A. V. Olinto, Phys. Rev. D 48, 946 (1993)
19. *On Constraining Electroweak-Baryogenesis with Primordial Nucleosynthesis*, G. Fuller, K. Jedamzik, G. Mathews, & A. V. Olinto, Phys. Lett. B 333, 135 (1994)
20. *Primordial Magnetic Fields Generated at the Quark-Hadron Phase Transition*, B. Cheng & A. V. Olinto, Phys. Rev. D 50, 2421 (1994)
21. *Cosmology at the Millennium*, A. V. Olinto, in the Proceedings of the 1994 APS Division of Particles & Fields Meeting, Ed. S. Seidel, World Scientific (1995)
22. *Extragalactic Magnetic Field and the Highest Energy Cosmic Rays*, S. Lee, A. V. Olinto, & G. Sigl, Ap. J. Lett. 455, L1 (1995)
23. *Generation of Density Perturbations by Primordial Magnetic Fields*, E. Kim, A. V. Olinto, R. Rosner, Ap. J. 468, 28 (1996)
24. *Observational Constraints on the Internal Structure and Dynamics of the Vela Pulsar*, M. Abney, R. Epstein, & A. V. Olinto, Ap. J. Lett., 466, L91 (1996)
25. *Constraints on Primordial Magnetic Fields from Big Bang Nucleosynthesis*, B. Cheng, A. V. Olinto, J. Truran, & D. Schramm, Phys. Rev. D, 54 (1996)
26. *Cosmological Magnetic Fields*, A. V. Olinto, in the Proceedings of the XVIII Texas Symposium on Relativistic Astrophysics, Chicago, 1996; Ed. A. V. Olinto, J. Frieman, and D. N. Schramm, World Scientific (1998)
27. *Constraints on the Production of Ultra-High-Energy Cosmic Rays by Neutron Stars*, A. Venkatesan, M. C. Miller, & A. V. Olinto, Ap.J. 484, 323 (1997)
28. *Primordial Magnetic Fields from Cosmological First Order Phase Transitions*, G. Sigl, A. V. Olinto, & K. Jedamzik, Physical Review D 55, 4582 (1997)
29. *Ultra-High Energy Cosmic Ray Sources and Large Scale Magnetic Fields*, M. Lemoine, G. Sigl, A. V. Olinto, & D. Schramm, Ap J Lett 486, L115 (1997)
30. *Maximum Likelihood Analysis of Clusters of Ultra-High Energy Cosmic Rays*, G. Sigl, M. Lemoine, & A. V. Olinto, Phys. Rev. 56, 4470 (1997)
31. *Cosmological Magnetic Fields*, A. V. Olinto, in the Proceedings of the 2nd RESCEU Symposium, University of Tokyo, 1997, Ed. M. Minowa, Universal Academic Press (1998)
32. *Damping of Cosmic Magnetic Fields*, K. Jedamzik, V. Katalinic, & A. V. Olinto, Phys. Rev. D 57, 3264 (1998)
33. *Neutron Stars and Black Holes as MACHOs*, A. Venkatesan, A. V. Olinto, & J. Truran, Ap. J. 516, vol. 2 (1999)
34. *A Magnetized Local Supercluster and the Origin of the Highest Energy Cosmic Rays*, P. Blasi & A. V. Olinto, Phys. Rev. D, 59 023001 (1999)
35. *New Limits on Cosmological Magnetic Fields*, P. Blasi, S. Burles, & A. V. Olinto, in the Proceedings of the XIX Texas Symposium on Relativistic Astrophysics, Paris, 1998;

Ed. J. Paul, T. Montmerle, and E. Aubourg, Nuclear Physics B (Proc. Supp.), Elsevier Science (1999)

36. *Cosmological Magnetic Field Limits in an Inhomogeneous Universe*, P. Blasi, S. Burles, & A. V. Olinto, Ap. J. Letters, 514, L79 (1999)

37. *Rapid dissipation of magnetic fields due to Hall current*, S.I. Vainshtein, S. M. Chitre, & A. V. Olinto, Phys. Rev. E, 61, 4422 (2000)

38. *Galactic Ultra-High-Energy Cosmic Rays*, A. V. Olinto, R.I. Epstein, and P. Blasi, in the proceedings of the 26th International Cosmic Rays Conference, Salt Lake City (1999)

39. *Ultra-High Energy Cosmic Ray Accelerators*, A. V. Olinto, in the Proceedings of the IAU Symposium on *Highly Energetic Physical Processes and Mechanisms for Emissions from Astrophysical Plasmas*, Ed. P.C.H. Martens & S. Tsuruta, ASP (1999)

40. *Stochastic Acceleration and Non-Thermal Emission in Clusters of Galaxies*, P. Blasi & A. V. Olinto, in the Proceedings of the IAU Symposium on *Highly Energetic Physical Processes and Mechanisms for Emissions from Astrophysical Plasmas*, Ed. P.C.H. Martens & S. Tsuruta, ASP (1999)

41. *Ultra-High Energy Cosmic Rays: the theoretical challenge*, A.V. Olinto, Phys. Rept. 333-334 (2000) 329-348

42. *The Mystery of the Ultra-High Energy Cosmic Rays*, A. V. Olinto, in the proceedings of International Summer School on *Experimental Physics of Gravitational Waves*, Ed. F. Vetrano, Urbino (1999)

43. *Ultra-High Energy Cosmic Rays from Young Neutron Star Winds*, P. Blasi, R.I. Epstein, and A. V. Olinto, Ap. J. Letters, 533, L123 (2000)

44. *A Limit on Primordial Small-Scale Magnetic Fields from CMB Distortions*, K. Jedamzik, V. Katalinic, and A. V. Olinto, Phys. Rev. Lett. 85, 700 (2000)

45. *The Effect of a Non-Thermal Tail on the Sunyaev-Zeldovich Effect in Clusters of Galaxies*, P. Blasi, A. V. Olinto, and A. Stebbins, ApJ. Letters, 535, L71 (2000)

46. *Cosmic Neutrinos and New Physics beyond the Electroweak Scale*, C. Tyler, A. V. Olinto, and G. Sigl, Phys. Rev. D 63, 55001 (2001)

47. *The Greisen Zatzepin Kuzmin Feature in our Neighborhood of the Universe*, M. Blanton, P. Blasi, A. V. Olinto, Astroparticle Phys. 15, 275-286 (2001)

48. *From the Galaxy to the Edge of the Universe: Plausible Sources of UHECRs*, A. V. Olinto, proceedings of the International Workshop on Observing Ultra High Energy Cosmic Rays From Space and Earth, Metepec, Puebla, Mexico (2000). AIP Conference Proceedings, Vol. 566. Edited by Humberto Salazar, Luis Villaseor and Arnulfo Zepeda. American Institute of Physics, 2001, p.99-112

49. *Theoretical Challenges in Ultra-High Energy Cosmic Ray Physics*, A. V. Olinto, in the proceedings of the XI International Symposium on Very High Energy Cosmic Ray Interactions, Campinas, Brazil (2000).

50. *The Origin of the Highest Energy Cosmic Rays*, A. V. Olinto, in the Proceedings of the 6th International Workshop on Relativistic Aspects of Nuclear Physics (RANP2000), Tabatinga, SP, Brazil, (2001).
51. *The Greisen Zatzepin Kuzmin feature in our neighborhood and plausible sources for UHECRs*, A. V. Olinto, in the Proceedings of the 7th Taipei Astrophysics Workshop on Cosmic Rays in the Universe, National Central University, Chung-Li, Taiwan, (2001).
52. *WIMPS Are Stronger When They Stick Together*, Angela V. Olinto, Pasquale Blasi, Craig Tyler, in the Proc. of the 27th International Cosmic Ray Conference, Hamburg, Germany, August 2001, astro-ph/0108060
53. *Galactic Magnetic Field Structure and Ultra High Energy Cosmic Ray Propagation*, Sean O'Neill, Angela V. Olinto, Pasquale Blasi, in the Proceedings of the 27th International Cosmic Ray Conference, Hamburg, Germany, August 2001 (astro-ph/0108401).
54. *The Origin of the Super-GZK Particles*, A. V. Olinto, in the Proceedings of the International Workshop on Extremely High Energy Cosmic Rays, Institute for Cosmic Ray Research and University of Tokyo, March 22-23, 2001, Kashiwa, Japan.
55. *The Future of Ultra High Energy Cosmic Rays*, A. V. Olinto, in the Proceedings of the TAUP 2001, Gran Sasso, Italy, September 2001, Nucl. Phys. Proc. Suppl. 110 (2002) 434-442
56. *Detecting WIMPs in the Microwave Sky*, P. Blasi, A. V. Olinto, and C. Tyler, Astroparticle Physics 18, (2003) 649-662, astro-ph/0202049
57. *Brane factories*, E.-J. Ahn, M. Cavaglia, A. V. Olinto, Phys. Lett. B 551, 1 (2003)
58. *The Detectability of Neutralino Clumps via Atmospheric Cherenkov Telescopes*, A. Tasitsiomi, and A. V. Olinto, Physical Review D 66, 083006 (2002), astro-ph/0206040
59. *Gamma-Ray Constraints on Neutralino Dark Matter Clumps in the Galactic Halo*, R. Aloisio, P. Blasi, A. V. Olinto, Astrophys.J. 601 (2004) 47-53, astro-ph/0206036
60. *On the statistical significance of the GZK feature in the spectrum of ultra high energy cosmic rays*, D. De Marco, P. Blasi, A. V. Olinto, Astropart.Phys. 20 (2003) 53-65, astro-ph/0301497
61. *Low Statistics of EHECRs*, A. V. Olinto, D. De Marco, P. Blasi, in the Proceedings of the International Workshop on Extremely High Energy Cosmic Rays, RIKEN, Japan astro-ph/0303177
62. *Messengers of the Extreme Universe*, A. V. Olinto in the Proceedings of the XXI Texas Symposium on Relativistic Astrophysics, Texas in Tuscany. Florence, Italy, Eds.: R. Bandiera, R. Maiolino, F. Mannucci. Singapore: World Scientific Publishing, ISBN 981-238-580-0, 2003, p. 353 - 362, astro-ph/0305177
63. *The GZK Feature in the Spectrum of UHECRs: What is it Telling Us?*, D. De Marco, P. Blasi, A. V. Olinto, in the Proceedings of the 28th International Cosmic Ray Conference, Tsukuba, Japan. Eds: Kajita, Asaoka, Kawachi, Matsubara and Sasaki, p.655, astro-ph/0305336

64. *TeV black hole fragmentation and detectability in extensive air-showers*, E.-J. Ahn, M. Ave, M. Cavaglia, A. V. Olinto, Phys. Rev. D68 (2003) 043004, hep-ph/0306008
65. *Probing TeV gravity with extensive air-showers*, M. Ave, E.-J. Ahn, M. Cavaglia, A. V. Olinto, in the Proceedings of the 28th International Cosmic Ray Conference, Tsukuba, Japan, (2003), astro-ph/0306344
66. *Neutralino annihilation gamma-rays from clumps and the LMC*, A. Tasitsiomi, J. Gaskins, A. V. Olinto, Proceedings of 2nd VERITAS symposium, New Astron.Rev. 48 (2004) 473-475, astro-ph/030656
67. *Gamma-ray and synchrotron emission from neutralino annihilation in the Large Magellanic Cloud*, A. Tasitsiomi, J. Gaskins, A. V. Olinto, Astropart. Phys. 21 (2004) 637-650, astro-ph/0307375
68. *Uncertainties in limits on TeV-gravity from neutrino-induced air showers*, E.-J. Ahn, M. Cavaglia, A. V. Olinto, Astropart. Phys. 22, issue 5-6, page 377-385 (2005), hep-ph/0312249
69. *Neutralino Annihilation at the Galactic Center Revisited*, R. Aloisio, P. Blasi, A. V. Olinto, JCAP 0405 (2004) 007, astro-ph/0402588
70. *Rapporteur talk for Ultra High Energy Cosmic Rays (HE 1.3, 1.4, 1.5): Messengers of the Extreme Universe*, A. V. Olinto, in Frontiers of Cosmic Ray Science, Vol. 8, p. 299, of the Proceedings of the 28th International Cosmic Ray Conference, Tsukuba, Japan, Eds: T. Kajita, Y. Asaoka, A. Kawachi, Y. Matsubara, and M. Sasaki, Universal Academy Press (2004), astro-ph/0404114
71. *Cosmogenic Neutrinos from Ultra-High Energy Nuclei*, M. Ave, N. Busca, A. V. Olinto, A. A. Watson, T. Yamamoto, Astropart. Phys. 23 (2005) 19-29, astro-ph/0409316
72. *The Status of Ultra-High Energy Cosmic Ray Studies* A. V. Olinto, in the Proceedings of Les Rencontres de Physique de la Vallee D'Aoste: Results and Perspectives in Particle Physics (2004).
73. *Ultra-High Energy Cosmic Rays and Cosmogenic Neutrinos*, M. Ave, N. Busca, A. V. Olinto, A. A. Watson, T. Yamamoto, in the Proceedings of CRIS 04, Cosmic Ray International Seminar - GZK and Surroundings.
74. *The Highest Energy Cosmic Rays*, A. V. Olinto, High Energy Gamma-Ray Astronomy: 2nd International Symposium, Proceedings of the conference held 26-30 July 2004 in Heidelberg (Germany). Edited by Felix A. Aharonian, Heinz J. Vlk, and Dieter Horns. AIP Conference Proceedings, Volume 745. New York: American Institute of Physics, 2005., p.48-59
75. *New Views of the Universe*, A. V. Olinto, in the Proceedings of 5th Rencontres du Vietnam (2005).
76. *Ultra High Energy Cosmic Rays and the Magnetized Universe*, A. V. Olinto, in the Journal of the Korean Astronomical Society, vol. 37, no. 5, pp. 413-420 (2005)

77. *Magnetic Fields and Ultra High Energy Cosmic Rays*, A. V. Olinto, in the Proceedings of the International workshop on Magnetic Fields in the Universe: from Laboratory and Stars to Primordial Structures, AIP Conference Proceedings, Volume 784, pp. 396-406 (2004).
78. *Deciphering the Extreme Universe*, A. V. Olinto, in the proceedings of the 28th Johns Hopkins Workshop on Current Problems in Particle Theory: Hyperspace, Superspace, Theory Space and Outer Space, (2005)
79. *UHE nuclei propagation and the interpretation of the ankle in the cosmic-ray spectrum*, D. Allard, E. Parizot, E. Khan, S. Goriely, A. V. Olinto, Astronomy and Astrophysics, Vol. 443-3 (2005) L29-L32, astro-ph/0505566
80. *Statistical and systematic uncertainties in the event reconstruction and $S(1000)$ determination by the Pierre Auger surface detector*, the Pierre Auger Collaboration, the 29th ICRC Proceedings (2005), astro-ph/0507029
81. *First Estimate of the Primary Cosmic Ray Energy Spectrum above 3 EeV from the Pierre Auger Observatory*, the Pierre Auger Collaboration, ICRC-05-124, the 29th ICRC Proceedings (2005), astro-ph/0507150
82. *Anisotropy Studies Around the Galactic Center at EeV Energies with Auger Data*, the Pierre Auger Collaboration, the 29th ICRC Proceedings (2005), astro-ph/0507331
83. *Upper limit on the primary photon fraction from the Pierre Auger Observatory*, the Pierre Auger Collaboration, the 29th ICRC Proceedings (2005), astro-ph/0507402
84. *Coverage and large scale anisotropies estimation methods for the Pierre Auger Observatory*, the Pierre Auger Collaboration, ICRC-05-111, the 29th ICRC Proceedings (2005), astro-ph/0507517
85. *Search for localized excess fluxes in Auger sky maps and prescription results*, the Pierre Auger Collaboration, ICRC-05-120, the 29th ICRC Proceedings (2005), astro-ph/0507600
86. *A description of some ultra high energy cosmic rays observed with the Pierre Auger Observatory*, the Pierre Auger Collaboration, ICRC-05-104, the 29th ICRC Proceedings (2005).
87. *Detection of very inclined showers with the Auger Observatory*, the Pierre Auger Collaboration, ICRC-05-115, the 29th ICRC Proceedings (2005).
88. *Extragalactic cosmic-ray source composition and the interpretation of the ankle*, D. Allard, E. Parizot, A. V. Olinto, E. Khan, S. Goriely, the 29th ICRC Proceedings, 2005, astro-ph/0508465
89. *Deciphering the Extreme Universe with UHE Cosmic Ray*, A. V. Olinto, Inflating Horizon of Particle Astrophysics and Cosmology, Universal Academy Press, Inc. and Yamada Science Foundation (2005).
90. *A closer look at the spectrum and small scale anisotropies of UHECRs*, D. De Marco, P. Blasi, A. V. Olinto, Journal of Cosmology and Astroparticle Physics, JCAP 0601 (2006) pp. 002, astro-ph/0507324

91. *On the transition from Galactic to extragalactic cosmic-rays: spectral and composition features from two opposite scenarios* D. Allard, E. Parizot, and A.V. Olinto, *Astropart. Phys.*, Volume 27, Issue 1, 61-75, astro-ph/0512345
92. *Cosmogenic Neutrinos from the propagation of Ultra High Energy Nuclei* D. Allard, M. Ave, N. Busca, M. A. Malkan, A. V. Olinto, E. Parizot, F. W. Stecker, and T. Yamamoto, *Journal of Cosmology and Astroparticle Physics*, 0609 (2006) 005, astro-ph/0605327
93. *Small Scale Anisotropy Predictions for the Auger Observatory*, D. De Marco, P. Blasi, A. V. Olinto, *Journal of Cosmology and Astroparticle Physics*, JCAP 0607 (2006) 015, astro-ph/0603615
94. *Population Studies of the Unidentified EGRET Sources*, J. Siegal-Gaskins, V. Pavlidou, A. V. Olinto, C. Brown, B. D. Fields, proceedings of *The Multi-Messenger Approach to High Energy Gamma-Ray Sources*, Barcelona; Ap&SS 309 (2007) 43, astro-ph/0611273
95. *Unidentified EGRET Sources and the Extragalactic Gamma-Ray Background*, V. Pavlidou, J. Siegal-Gaskins, B. D. Fields, A. V. Olinto, proceedings of *The Multi-Messenger Approach to High Energy Gamma-Ray Sources*, Barcelona; Ap&SS 309 (2007) 81, astro-ph/0611271
96. *The Mystery of Ultra-High Energy Cosmic Rays*, A. V. Olinto, AIP Conf.Proc.842:937-944, 2006. Also in *Santa Fe 2005, Particles and nuclei* 937-944 (2006).
97. *Cosmic Rays: The Highest-Energy Messengers*, A. V. Olinto, *Science* (5 January 2007): Vol. 315. no. 5808, pp. 68 - 70
98. *Signatures of the extragalactic cosmic-ray source composition from spectrum and shower depth measurements*, D. Allard, A. V. Olinto, E. Parizot, *Astronomy and Astrophysics*, Vol. 473, 1 (2007) 59, astro-ph/0703633
99. *Horizons and Anisotropies of Ultra-High Energy Cosmic Rays*, A. V. Olinto, D. Allard, E. Armengaud, A. Kravtsov, Proceedings of the 30th International Cosmic Ray Conference. July 3 - 11, 2007, Mrida, Yucatn, Mexico. Edited by Rogelio Caballero, Juan Carlos D'Olive, Gustavo Medina-Tanco, Lukas Nellen, Federico A. Snchez, Jos F. Valds-Galicia. Universidad Nacional Autnoma de Mxico, Mexico City, Mexico, Vol. 4 (2008) 527.
100. *Unresolved Unidentified Source Contribution to the Gamma-ray Background* V. Pavlidou, J. M. Siegal-Gaskins, B. D. Fields, A. V. Olinto, C. Brown, *Astrophys. J.*, 677 (2008) 27, astro-ph/0710.0619
101. *A luminosity constraint on Galactic populations of gamma-ray emitters from the unidentified EGRET sources* J. M. Siegal-Gaskins, V. Pavlidou, A. V. Olinto, C. Brown, B. D. Fields, *J. Phys. G* 36 (2009) 055201, astro-ph/0710.0874
102. *Correlation of the highest energy cosmic rays with nearby extragalactic objects*, J. Abraham et al., The Pierre Auger Collaboration, *Science*, vol. 318 (9 November 2007) 939, astro-ph/0711.2256
103. *Upper limit on the cosmic-ray photon flux above 10^{19} eV using the surface detector of the Pierre Auger Observatory*, J. Abraham et al., The Pierre Auger Collaboration, *Astropart. Phys.* 29 (2008) 243-256, astro-ph/0712.1147

104. *Upper limit on the diffuse flux of UHE tau neutrinos from the Pierre Auger Observatory*, J. Abraham et al., The Pierre Auger Collaboration, Phys. Rev. Lett. 100 (2008) 211101, astro-ph/0712.1909
105. *Correlation of the highest-energy cosmic rays with the positions of nearby active galactic nuclei*, J. Abraham et al., The Pierre Auger Collaboration, Astroparticle Physics 29 (2008) 188; Erratum-ibid.30 (2008) 45, astro-ph/0712.2843
106. *Implications of the cosmic ray spectrum for the mass composition at the highest energies*, D. Allard, N.G Busca, G. Decerprit, A. V. Olinto, E. Parizot, JCAP 0810 (2008) 033, astro-ph/0805.4779
107. *Observation of the suppression of the flux of cosmic rays above 4×10^{19} eV*, J. Abraham et al., The Pierre Auger Collaboration, Phys. Rev. Lett.101(2008) 061101, astro-ph/0806.4302
108. *Upper limit on the cosmic-ray photon fraction at EeV energies from the Pierre Auger Observatory*, J. Abraham et al., The Pierre Auger Collaboration, Astroparticle Physics 31 (2009) 399-406, astro-ph/0903.1127
109. *Limit on the diffuse flux of ultra-high energy tau neutrinos with the surface detector of the Pierre Auger Observatory*, J. Abraham et al., The Pierre Auger Collaboration, Phys. Rev. D79 (2009) 102001, astro-ph/0903.3385
110. *White Paper on Ultra-High Energy Cosmic Rays*, A. V. Olinto, J. H. Adams, C. D. Dermer, J. F. Krizmanic, J. W. Mitchell, P. Sommers, T. Stanev, F. W. Stecker, Y. Takahashi, (over 360 supporting scientists) submitted to Astro 2010, astro-ph/0903.0205
111. *The 2pt+: an enhanced 2 point correlation function*, M. Ave, L. Cazon, J. Cronin, J. R. T. de Mello Neto, A. V. Olinto, V. Pavlidou, P. Privitera, B. Siffert, F. Schmidt, T. Venters, JCAP 0907 (2009) 23, astro-ph/0905.2192
112. *Trigger and Aperture of the Surface Detector Array of the Pierre Auger Observatory*, The Pierre Auger Collaboration, Nuclear Instruments and Methods in Physics Research A613 (2010), 29-39.
113. *Atmospheric effects on extensive air showers observed with the Surface Detector of the Pierre Auger Observatory*, The Pierre Auger Collaboration, Astroparticle Physics 32 (2009), 89, arXiv:0906.5497
114. *Measurement of the Depth of Maximum of Extensive Air Showers above 1018 eV*, The Pierre Auger Collaboration, Physical Review Letters 104 (2010) 091101, arXiv:1002.0699
115. *Measurement of the energy spectrum of cosmic rays above 1018 eV using the Pierre Auger Observatory*, The Pierre Auger Collaboration, Physics Letters B 685 (2010) 239, arXiv:1002.1975
116. *The Northern Site of the Pierre Auger Observatory*, The Pierre Auger Collaboration, New Journal of Physics 12 (2010) 035001.
117. *The Fluorescence Detector of the Pierre Auger Observatory*, to appear in Nuclear Instruments and Methods in Physics Research (NIM A, 2010), arXiv:0907.4282

118. *Update on the correlation of the highest energy cosmic rays with nearby extragalactic matter*, P. Abreu et al., The Pierre Auger Collaboration, *Astroparticle Physics* 34 (2010) 314, arXiv:1009.1855
119. *Cosmogenic Neutrinos: parameter space and detectability from PeV to ZeV*, K. Kotera, D. Allard, and A. V. Olinto, *JCAP* 1010 (2010) 13, arXiv:1009.1382
120. *The exposure of the hybrid detector of the Pierre Auger Observatory*, J. Abraham et al., The Pierre Auger Collaboration, *Astroparticle Physics* 34 (2011) 368.
121. *Ultrahigh Energy Cosmic Rays and Neutrinos*, A. V. Olinto, K. Kotera, and D. Allard, proceedings of Neutrino Oscillation Workshop, NOW 2010, *Nuclear Physics B - Proc. Suppl.* Vol. 217, 23 (2011).
122. *Search for First Harmonic Modulation in the Right Ascension Distribution of Cosmic Rays Detected at the Pierre Auger Observatory*, Pierre Auger Collaboration: P. Abreu et al., *Astroparticle Physics* 34 (2011) 627.
123. *The Astrophysics of Ultrahigh Energy Cosmic Rays* K. Kotera and A. V. Olinto, *Annu. Rev. Astron. Astrophys.* 49 (2011) 119, arXiv: 1101.4256
124. *Anisotropy and chemical composition of ultra-high energy cosmic rays using arrival directions measured by the Pierre Auger Observatory*, Pierre Auger Collabor. P. Abreu et al., *JCAP*06 (2011) 022, arXiv:1106.3048
125. *The Pierre Auger Observatory I: The Cosmic Ray Energy Spectrum and Related Measurements*, Pierre Auger Collaboration: P. Abreu et al., 2nd International Cosmic Ray Conference, Beijing, China, August 2011, arXiv: 1107.4809
126. *The Pierre Auger Observatory II: Studies of Cosmic Ray Composition and Hadronic Interaction models*, Pierre Auger Collaboration: P. Abreu et al., 32nd International Cosmic Ray Conference, Beijing, China, August 2011, arXiv: 1107.4804
127. *The Pierre Auger Observatory III: Other Astrophysical Observations*, Pierre Auger Collaboration: P. Abreu et al., 32nd International Cosmic Ray Conference, Beijing, China, August 2011, arXiv: 1107.4805
128. *The Pierre Auger Observatory IV: Operation and Monitoring*, Pierre Auger Collaboration: P. Abreu et al., 32nd International Cosmic Ray Conference, Beijing, China, August 2011, arXiv:1107.4806
129. *The Pierre Auger Observatory V: Enhancements*, Pierre Auger Collaboration: P. Abreu et al., 32nd International Cosmic Ray Conference, Beijing, China, August 2011, arXiv:1107.4807
130. *Search for signatures of magnetically-induced alignment in the arrival directions measured by the Pierre Auger Observatory* Pierre Auger Collaboration: P. Abreu et al., Accepted for publication in *Astroparticle Physics*, arXiv:1111.2472
131. *The Lateral Trigger Probability function for the Ultra-High Energy Cosmic Ray Showers detected by the Pierre Auger Observatory* Pierre Auger Collaboration: P. Abreu et al., *Astroparticle Physics* 35 (2011) 266-276, arXiv:1111.6645

132. *Trigger and Aperture of the Surface Detector Array of the Pierre Auger Observatory* Pierre Auger Collaboration: P. Abreu et al., NIM A613 (2010), 29-39, arXiv:1111.6764
133. *The effect of the geomagnetic field on cosmic ray energy estimates and large scale anisotropy searches on data from the Pierre Auger Observatory* Pierre Auger Collaboration: P. Abreu et al., JCAP11 (2011) 022, arXiv:1111.7122
134. *Description of Atmospheric Conditions at the Pierre Auger Observatory using the Global Data Assimilation System (GDAS)* Pierre Auger Collaboration: P. Abreu et al., Astropart. Phys. 35 (2012) 591-607, arXiv:1201.2276
135. *Cosmic Rays at the highest energies* Angela V. Olinto, Proceedings of TAUP 2011, Journal of Physics: Conference Series, Vol. 375, Issue 5, 052001 (2012), arXiv:1201.4519
136. *Newly-born pulsars as sources of ultrahigh energy cosmic rays* Ke Fang, Kumiko Kotera, Angela V. Olinto, Astrophysical Journal, Volume 750, Issue 2, article id. 118 (2012), arXiv:1201.5197
137. *AstroParticle Physics at the Highest Energies* Angela V. Olinto, 32nd International Cosmic Ray Conference, Beijing, China, August 2011, arXiv:1202.0355
138. *A search for ultra-high energy neutrinos in highly inclined events at the Pierre Auger Observatory* Pierre Auger Collaboration: P. Abreu et al., Phys. Rev. D 84, 122005 (2011); Erratum: Phys. Rev. D 85, 029902(E) (2012), arXiv: 1202.1493
139. *Summary Report of JEM-EUSO Workshop at KICP in Chicago* J. H. Adams Jr et al., arXiv:1203.3451
140. *The JEM-EUSO Mission: Status and Prospects in 2011* (JEM-EUSO Collaboration) J. H. Adams Jr et al., 32nd International Cosmic Ray Conference, Beijing, China, arXiv:1204.5065
141. *The Rapid Atmospheric Monitoring System of the Pierre Auger Observatory* (Pierre Auger Collaboration) P. Abreu et al., JINST 7 (2012) P09001; arXiv:1208.1675
142. *Antennas for the Detection of Radio Emission Pulses from Cosmic-Ray induced Air Showers at the Pierre Auger Observatory* (Pierre Auger Collaboration) P. Abreu et al., JINST 7 (2012) P1001; arXiv:1209.3840
143. *UHECR Theory and Phenomenology: Summary and Outlook*, Angela V. Olinto, Proceedings of the symposium UHECR-2012 at CERN, European Physical Journal, 2013.
144. *Ultrahigh Energy Cosmic Ray Nuclei from Extragalactic Pulsars and the effect of their Galactic counterparts*, Ke Fang, Kumiko Kotera, Angela V. Olinto, JCAP 1303 (2013) 010; arXiv:1302.4482
145. *Signatures of pulsars in the light curves of newly formed supernova remnants*, Kumiko Kotera, E. Sterl Phinney, Angela V. Olinto, MNRAS, Vol. 432, Issue 4, p.3228-3236 (2013) arXiv:1304.5326
146. *An evaluation of the exposure in nadir observation of the JEM-EUSO mission* J.H. Adams, et al., (JEM-EUSO Collab), Astropart. Phys. 44 (2013) 76; arXiv:1305.2478

147. *Sensitivity of JEM-EUSO to Ensemble Fluctuations in the Ultra-High Energy Cosmic Ray Flux*, Markus Ahlers, Luis A. Anchordoqui, Angela V. Olinto, Thomas C. Paul, Andrew M. Taylor, Proceedings of the 33rd International Cosmic Ray Conference (ICRC2013), Rio de Janeiro, Brazil, 2-9 July, 2013. Paper Id: 239; arXiv:1306.0910.
148. *Pinning down the cosmic ray source mechanism with new IceCube data*, Luis A. Anchordoqui, Haim Goldberg, Morgan H. Lynch, Angela V. Olinto, Thomas C. Paul, Thomas J. Weiler, Phys.Rev. D89 (2014) no.8, 083003, arXiv:1306.5021
149. *The Pierre Auger Observatory: Contributions to the 33rd International Cosmic Ray Conference (ICRC 2013)*, The Pierre Auger Collaboration, Proceedings of the 33rd ICRC, arXiv:1307.5059
150. *Roadmap for Ultra-High Energy Cosmic Ray Physics and Astronomy (whitepaper for Snowmass 2013)*, Luis A. Anchordoqui et al., arXiv:1307.5312
151. *Pierre Auger Observatory and Telescope Array: Joint Contributions to the 33rd International Cosmic Ray Conference (ICRC 2013)*, The Telescope Array and Pierre Auger Collaborations, Proceedings of the 33rd ICRC, arXiv:1310.0647
152. *Highlights from the Pierre Auger Observatory*, A. Letessier-Selvon et al. (Pierre Auger Collaboration), Proceed. of the 33rd ICRC, arXiv:1310.4620
153. *The JEM-EUSO Mission: Contributions to the ICRC 2013* JEM-EUSO Collaboration (J.H. Adams Jr. et al.), Proceedings of the 33rd ICRC, arXiv:1307.7071
154. *The Bright Side of the Cosmic Frontier: Cosmic Probes of Fundamental Physics*, J.J. Beatty et al., Snowmass Cosmic Frontier CF6 Working Group Summary; arXiv:1310.5662
155. *Cosmic Frontier Indirect Dark Matter Detection Working Group Summary* J. Buckley, et al., Snowmass Indirect Dark Matter Detection CF2 Working Group Summary, arXiv:1310.7040
156. *Testing the Newborn Pulsar Origin of Ultrahigh Energy Cosmic Rays with EeV Neutrinos*, Ke Fang, Kumiko Kotera, Kohta Murase, Angela V. Olinto, Phys. Rev. D 90, 103005 (2014); Phys. Rev. D 92, 129901 (2015), arXiv:1311.2044
157. *Planning the Future of U.S. Particle Physics (Snowmass 2013): Chapter 4: Cosmic Frontier*, J. L. Feng, S. Ritz, et al., arXiv:1401.6085
158. *Large Scale Anisotropy of Cosmic Rays and Directional Neutrino Signals from Galactic Sources*, L. A. Anchordoqui, H. Goldberg, A. V. Olinto, T. C. Paul, B. J. Vlcek, T. J. Weiler, Proceedings of the 2nd Cosmic Ray Anisotropy Workshop, 26-28 September 2013, Madison, Wisconsin (IOP Conference Series); arXiv:1403.6628
159. *Is the Ultra-High Energy Cosmic-Ray Excess Observed by the Telescope Array Correlated with IceCube Neutrinos?* Ke Fang, Toshihiro Fujii, Tim Linden, Angela V. Olinto, Astrophys.J. 794 (2014) no.2, 126, arXiv:1404.6237
160. *A search for point sources of EeV photons*, Aab, A. et al (Pierre Auger Collaboration), ApJ, 789, 160 (2014), arXiv:1406.2912

161. *A Targeted Search for Point Sources of EeV Neutrons*, Aab, A. et al (Pierre Auger Collaboration), ApJ 789 (2014) L34, arXiv:1406.4038
162. *Reconstruction of inclined air showers detected with the Pierre Auger Observatory*, Aab, A. et al (Pierre Auger Collaboration), JCAP 1408 (2014) 08, 019, arXiv:1407.3214
163. *Searches for Large-Scale Anisotropy in the Arrival Directions of Cosmic Rays Detected above Energy of 10^{19} eV at the Pierre Auger Observatory and the Telescope Array*, Aab, A. et al (Pierre Auger and TA Collaborations), ApJ, 794, 172 (2014), arXiv:1409.3128
164. *Super Heavy Dark Matter in light of BICEP2, Planck and Ultra High Energy Cosmic Rays Observations*, R. Aloisio, S. Matarrese, and A.V. Olinto, JCAP 1508 (2015) 08, 024, arXiv:1504.01319
165. *An improved limit to the diffuse flux of ultra-high energy neutrinos from the Pierre Auger Observatory*, The Pierre Auger Collaboration, Aab et al., Phys. Rev. D 91, 092008 (2015), arXiv:1504.05397
166. *Energy Estimation of Cosmic Rays with the Engineering Radio Array of the Pierre Auger Observatory*, The Pierre Auger Collaboration, Aab et al., Phys. Rev. D 93, 122005 (2016), arXiv:1508.04267
167. *The Pierre Auger Observatory: Contributions to the 34th International Cosmic Ray Conference (ICRC 2015)*, The Pierre Auger Collaboration, Aab et al., PoS(ICRC2015), arXiv:1509.03732
168. *Pierre Auger Observatory and Telescope Array: Joint Contributions to the 34th International Cosmic Ray Conference (ICRC 2015)*, The Pierre Auger Collaboration, PoS(ICRC2015), arXiv: 1511.02103
169. *The IceCube Neutrino Observatory, the Pierre Auger Observatory and the Telescope Array: Joint Contribution to the 34th International Cosmic Ray Conference (ICRC 2015)*, The Pierre Auger Collaboration, Aab et al., PoS(ICRC2015), arXiv:1511.02109
170. *IceCube Constraints on Fast-Spinning Pulsars as High-Energy Neutrino Sources*, K. Fang, K. Kotera, K. Murase, A.V. Olinto, JCAP 04 (2016) 010, arXiv: 1511.08518
171. *Search for correlations between the arrival directions of IceCube neutrino events and ultrahigh-energy cosmic rays detected by the Pierre Auger Observatory and the Telescope Array*, The Pierre Auger Collaboration, Aab et al., JCAP01 (2016) 037, arXiv:1511.09408
172. *Nanosecond-level time synchronization of autonomous radio detector stations for extensive air showers*The Pierre Auger Collaboration, Aab et al., JINST 11 (2016) P01018 11 arXiv:1512.02216
173. *Azimuthal asymmetry in the risetime of the surface detector signals of the Pierre Auger Observatory* The Pierre Auger Collaboration: A. Aab et al., Phys. Rev. D 93, 072006 (2016), arXiv:1604.00978
174. *The Pierre Auger Observatory Upgrade - Preliminary Design Report*, A. Aab et al., for the Pierre Auger Collaboration; arXiv:1604.03637

175. *Prototype muon detectors for the AMIGA component of the Pierre Auger Observatory* A. Aab, et al., Pierre Auger Collaboration, JINST 11 (2016) P02012; arXiv:1605.01625
176. *Measurement of the Radiation Energy in the Radio Signal of Extensive Air Showers as a Universal Estimator of Cosmic-Ray Energy* The Pierre Auger Collaboration: A. Aab, et al., Phys. Rev. Lett. 116, 241101 (2016), arXiv:1605.02564
177. *Sensitivity of the space-based CHerenkov from Astrophysical Neutrinos Telescope (CHANT)*, A. Neronov, D.V. Semikoz, L.A. Anchordoqui, J. Adams, A.V. Olinto, Phys. Rev. D 95, 023004 (2017), arXiv:1606.03629
178. *High-energy neutrinos from sources in clusters of galaxies*, Ke Fang and Angela V. Olinto, The Astrophysical Journal, 828 (2016) 37 arXiv:1607.00380
179. *Ultrahigh-energy neutrino follow-up of Gravitational Wave events GW150914 and GW151226 with the Pierre Auger Observatory* The Pierre Auger Collaboration: A. Aab, et al., Phys. Rev. D 94, 122007 (2016), arXiv:1608.07378
180. *Search for ultrarelativistic magnetic monopoles with the Pierre Auger Observatory*, The Pierre Auger Collaboration: A. Aab, et al., Phys. Rev. D 94, 082002 (2016), arXiv:1609.04451
181. *Evidence for a mixed mass composition at the ‘ankle’ in the cosmic-ray spectrum* The Pierre Auger Collaboration: A. Aab, et al., Phys. Lett. B 762 (2016) 288-295, arXiv:1609.08567
182. *Testing Hadronic Interactions at Ultrahigh Energies with Air Showers Measured by the Pierre Auger Observatory*, The Pierre Auger Collaboration: A. Aab, et al., Phys. Rev. Lett. 117, 192001 (2016), arXiv:1610.08509
183. *Multi-resolution anisotropy studies of ultrahigh-energy cosmic rays detected at the Pierre Auger Observatory*, The Pierre Auger Collaboration: Aab et al., JCAP 06 (2017) 026, arXiv:1611.06812
184. *Search for photons with energies above 10 eV using the hybrid detector of the Pierre Auger Observatory*, The Pierre Auger Collaboration: A. Aab, et al., JCAP 04 (2017) 009, arXiv:1612.01517
185. *A targeted search for point sources of EeV photons with the Pierre Auger Observatory*, The Pierre Auger Collaboration: A. Aab, et al., Ap J Letters, 837:L25 (7pp), 2017, arXiv:1612.04155
186. *Combined fit of spectrum and composition data as measured by the Pierre Auger Observatory*, The Pierre Auger Collaboration: A. Aab, et al., JCAP04 (2017) 038, arXiv:1612.07155
187. *Calibration of the Logarithmic-Periodic Dipole Antenna (LPDA) Radio Stations at the Pierre Auger Observatory using an Octocopter*, The Pierre Auger Collaboration: A. Aab, et al., JINST 12 (2017) T10005, arXiv:1702.01392

188. *White paper on EUSO-SPB2* J. H. Adams Jr., L. A. Anchordoqui, J. A. Apple, M. E. Bertaina, M. J. Christl, F. Fenu, E. Kuznetsov, A. Neronov, A. V. Olinto, E. Parizot, T. C. Paul, G. Prevot, P. Reardon, I. Vovk, L. Wiencke, R. M. Young, arXiv:1703.04513
189. *Muon Counting using Silicon Photomultipliers in the AMIGA detector of the Pierre Auger Observatory* The Pierre Auger Collaboration: A. Aab, et al., JINST 12 (2017) P03002, arXiv:1703.06193
190. *The Pierre Auger Observatory: Contributions to the 35th International Cosmic Ray Conference (ICRC 2017)*, A. Aab, et al., for the Pierre Auger Collaboration, in the Proceedings of the 35th International Cosmic Ray Conference, ICRC2017, Busan, Korea; arXiv:1708.06592
191. *POEMMA: Probe Of Extreme Multi-Messenger Astrophysics* A. V. Olinto, et al., for the POEMMA Collaboration, in the Proceedings of the 35th International Cosmic Ray Conference, ICRC2017, Busan, Korea; arXiv:1708.07599
192. *Spectral Calibration of the Fluorescence Telescopes of the Pierre Auger Observatory*, A. Aab, et al., for the Pierre Auger Collaboration, Astroparticle Physics 95 (2017) 44-56, arXiv:1709.01537
193. *Observation of a Large-scale Anisotropy in the Arrival Directions of Cosmic Rays above 8×10^{18} eV*, A. Aab, et al., for the Pierre Auger Collaboration, Science 357 (22 September 2017) 1266; arXiv:1709.07321
194. *Search for High-energy Neutrinos from Binary Neutron Star Merger GW170817 with ANTARES, IceCube, and the Pierre Auger Observatory* A. Albert et al, Astrophys. J. Lett. 850 (2017) 2, L35; arXiv:1710.05839
195. *Inferences on Mass Composition and Tests of Hadronic Interactions from 0.3 to 100 EeV using the water-Cherenkov Detectors of the Pierre Auger Observatory*, A. Aab, et al., The Pierre Auger Collaboration, Phys. Rev. D, 96 (2017) 12, 122003; arXiv:1710.07249
196. *Indication of anisotropy in arrival directions of ultra-high-energy cosmic rays through comparison to the flux pattern of extragalactic gamma-ray sources* A. Aab, et al., The Pierre Auger Collaboration, Ap J Letters, 853:L29 (2018) arXiv:1801.06160
197. *Observation of inclined EeV air showers with the radio detector of the Pierre Auger Observatory* The Pierre Auger Collaboration, A. Aab, et al., JCAP 10, 026 (2018), arXiv:1806.05386
198. *First observations of speed of light tracks by a fluorescence detector looking down on the atmosphere* The JEM-EUSO Collaboration, G. Abdellaoui, et al. (2018) JINST 13 P05023, arXiv:1808.02557
199. *Large-scale cosmic-ray anisotropies above 4 EeV measured by the Pierre Auger Observatory* The Pierre Auger Collaboration, A. Aab, et al., Astrophys.J. 868, 4 (2018), arXiv:1808.03579
200. *Ultrahigh-Energy Cosmic Ray Composition from the Distribution of Arrival Directions*, Rita C. dos Anjos, Jorge F. Soriano, Luis A. Anchordoqui, Thomas C. Paul, Diego F. Torres, John F. Krizmanic, Timothy A. D. Paglione, Roberto J. Moncada, Frederic Sarazin, Lawrence Wiencke, Angela V. Olinto, Phys. Rev. D 98, 123018 (2018), arXiv:1810.04251

201. *Measurement of the average shape of longitudinal profiles of cosmic-ray air showers at the Pierre Auger Observatory*, The Pierre Auger Collaboration, A. Aab, et al., JCAP03 (2019) 018, arXiv:1811.04660
202. *Geometrical Constraints of Observing Very High Energy Earth-Skimming Neutrinos from Space*, Authors: C. Guepin, F. Sarazin, J. Krizmanic, J. Loerincs, A. Olinto, A. Piccone, JCAP 1903 (2019) 021, arXiv:1812.07596
203. *Data-driven estimation of the invisible energy of cosmic ray showers with the Pierre Auger Observatory*, The Pierre Auger Collaboration, A. Aab, et al., Phys. Rev. D 100, 082003 (2019); arXiv:1901.08040
204. *What is the nature and origin of the highest-energy particles in the universe?*, F. Sarazin, L. Anchordoqui, J. Beatty, D. Bergman, C. Covault, G. Farrar, J. Krizmanic, D. Nitz, A. Olinto, M. Unger, P. Tinyakov, L. Wiencke, white paper for the Astro2020 US decadal survey, arXiv:1903.04063
205. *Fundamental Physics with High-Energy Cosmic Neutrinos*, M. Ackermann, M. Ahlers, L. Anchordoqui, M. Bustamante, A. Connolly, C. Deaconu, D. Grant, P. Gorham, F. Halzen, A. Karle, K. Kotera, M. Kowalski, M. A. Mostafa, K. Murase, A. Nelles, A. Olinto, A. Romero-Wolf, A. Viereg, S. Wissel, white paper for the Astro2020 US decadal survey, arXiv:1903.04333
206. *Astrophysics Uniquely Enabled by Observations of High-Energy Cosmic Neutrinos*, M. Ackermann, M. Ahlers, L. Anchordoqui, M. Bustamante, A. Connolly, C. Deaconu, D. Grant, P. Gorham, F. Halzen, A. Karle, K. Kotera, M. Kowalski, M. A. Mostafa, K. Murase, A. Nelles, A. Olinto, A. Romero-Wolf, A. Viereg, S. Wissel, white paper for the Astro2020 US decadal survey, arXiv:1903.04334
207. *Open Questions in Cosmic-Ray Research at Ultrahigh Energies*, R. A. Batista, J. Biteau, M. Bustamante, K. Dolag, R. Engel, K. Fang, K.-H. Kampert, D. Kostunin, M. Mostafa, K. Murase, G. Sigl, F. Oikonomou, A. V. Olinto, M. I. Panasyuk, A. Taylor, M. Unger, “Multi-Messenger Astrophysics: New Windows to the Universe”, Front. Astron. Space Sci. 6 (2019) 23; arXiv:1903.06714
208. *Multi-Messenger Physics with the Pierre Auger Observatory*, The Pierre Auger Collaboration, A. Aab, et al., Frontiers in Astronomy and Space Sciences, Vol. 6, 24 (2019), arXiv:1904.11918
209. *POEMMA’s Target of Opportunity Sensitivity to Cosmic Neutrino Transient Sources*, T. M. Venters, M. H. Reno, J. F. Krizmanic, L. A. Anchordoqui, C. Guepin, A. V. Olinto, submitted Phys. Rev. D, arXiv:1906.07209
210. *Limits on point-like sources of ultra-high-energy neutrinos with the Pierre Auger Observatory*, The Pierre Auger Collaboration, A. Aab, et al. (367 additional authors not shown), JCAP 11 (2019) 004; arXiv:1906.07419
211. *Probing the origin of ultra-high-energy cosmic rays with neutrinos in the EeV energy range using the Pierre Auger Observatory*, The Pierre Auger Collaboration, A. Aab, et al. JCAP 10 (2019) 022; arXiv:1906.07422

212. *Performance and science reach of POEMMA for ultrahigh-energy particles*, L. A. Anchordoqui, D. R. Bergman, M. E. Bertaina, F. Fenu, J. F. Krizmanic, A. Liberatore, A. V. Olinto, M. H. Reno, F. Sarazin, K. Shinozaki, J. F. Soriano, R. Ulrich, M. Unger, T. M. Venters, L. Wiencke, Phys. Rev. D 101, 023012 (2020), arXiv:1907.03694
213. *POEMMA (Probe of Extreme Multi-Messenger Astrophysics) design* POEMMA Collaboration, A. V. Olinto, et al., Astro2020 APC white paper: Medium-class Space Particle Astrophysics Project, arXiv:1907.06217
214. *A new calculation of Earth-skimming very- and ultra-high energy tau neutrinos*, M. H. Reno, T. M. Venters, J. F. Krizmanic, L. A. Anchordoqui, C. Guepin, A. V. Olinto, the 36th International Cosmic Ray Conference, PoS (ICRC2019) 989, arXiv:1908.03603
215. *UCIRC2: An Infrared Cloud Monitor for EUSO-SPB2*, Rebecca Diesing, Khadijat Durojaiye, Seamus Flannery, Kameron Mehling, Noah Friedlander, Alexa Bukowski, Emily Donovan, Stephan Meyer, Angela V. Olinto, the 36th International Cosmic Ray Conference (ICRC 2019); arXiv:1909.02663
216. *Results of the EUSO-SPB1 flight*, J. Eser, et al., JEM-EUSO Collaboration, the 36th ICRC (Madison, WI; 2019), PoS(ICRC2019)247; arXiv:1909.03005
217. *Estimation of the exposure for the air shower detection mode of EUSO-SPB1*, K. Shinozaki, et al., JEM-EUSO Collaboration the 36th International Cosmic Ray Conference (Madison; 2019) Pos (ICRC2019) 427; arXiv:1909.05713
218. *The Pierre Auger Observatory: Contributions to the 36th International Cosmic Ray Conference (ICRC 2019)*, The Pierre Auger Collaboration, A. Aab, et al., the 36th International Cosmic Ray Conference (ICRC 2019), Madison, WI; arXiv:1909.09073
219. *The POEMMA (Probe of Extreme Multi-Messenger Astrophysics) mission*, A. V. Olinto, et al. (POEMMA Collaboration), Proceedings of the 36th International Cosmic Ray Conference (Madison; 2019) Pos (ICRC2019) 378; arXiv:1909.09466
220. *The Extreme Universe Space Observatory on a Super-Pressure Balloon II Mission*, L. Wiencke and A. V. Olinto, Proceedings of the 36th International Cosmic Ray Conference (Madison; 2019), PoS (ICRC2019) 466; arXiv:1909.12835
221. *Contributions to the 36th International Cosmic Ray Conference (ICRC 2019) of the JEM-EUSO Collaboration*, G. Abdellaoui, et al., PoS (ICRC2019); arXiv:1912.08666
222. *The Case for Probe-class NASA Astrophysics Missions*, M. Elvis et al., Astro2020 APC white paper; arXiv:2002.12739
223. *Snowmass 2021 Letter of Interest: The Probe Of Multi-Messenger Astrophysics (POEMMA)*, A. V. Olinto et al.; arXiv:2008.13047
224. *Mini-EUSO mission to study Earth UV emissions on board the ISS*, S. Bacholle et al., Astrophys. J. Suppl. 253 (2021) 2, 36; arXiv:2010.01937
225. *Extreme Universe Space Observatory on a Super Pressure Balloon 1 calibration: from the laboratory to the desert*, J.H. Adams Jr., et al., Exper. Astron. 52 (2021) 1-2, 125-140; arXiv:2011.09617

226. *The POEMMA (Probe of Extreme Multi-Messenger Astrophysics) Observatory*, A. V. Olinto, et al., JCAP 06 (2021) 007; arXiv:2012.07945
227. *EUSO-SPB2 sensitivity to macroscopic dark matter*, Thomas C. Paul, Sarah T. Reese, Luis A. Anchordoqui, Angela V. Olinto, Proceedings of the 37th International Cosmic Ray Conference (ICRC 2012); arXiv:2104.01152
228. *Prospects for macroscopic dark matter detection at space-based and suborbital experiments*, L. A. Anchordoqui, et al., Europhys. Lett. 135 (2021) 51001, arXiv:2104.05131
229. *Hunting super-heavy dark matter with ultra-high energy photons*, Luis A. Anchordoqui, et al., Astropart. Phys. 132 (2021) 102614; arXiv:2105.12895
230. *Indirect dark matter searches at ultrahigh energy neutrino detectors* Claire Gupin, et al., Phys. Rev. D 104, 083002 (2021); arXiv:2106.04446
231. *Neutrino constraints on long-lived heavy dark sector particle decays in the Earth*, Mary Hall Reno et al., Proceedings of the 37th International Cosmic Ray Conference (ICRC 2021), arXiv:2107.0115
232. *Monte Carlo simulations of neutrino and charged lepton propagation in the Earth with nuPyProp*, Sameer Patel, et al., Proceedings of the 37th International Cosmic Ray Conference (ICRC 2021), arXiv:2109.08198
233. *Probing the properties of superheavy dark matter annihilating or decaying into neutrinos with ultra-high energy neutrino experiments*, Claire Gupin, et al., Proceedings of the 37th International Cosmic Ray Conference (ICRC 2021), arXiv:2109.08198
234. *Science and mission status of EUSO-SPB2*, J. Eser, A. V. Olinto, L. Wiencke; Proceedings of the 37th International Cosmic Ray Conference (ICRC 2021), arXiv:2112.08509
235. *EUSO-SPB2 Telescope Optics and Testing*, Viktoria Kungel, et al., Proceedings of the 37th International Cosmic Ray Conference (ICRC 2021), arXiv:2112.09373
236. *UCIRC2: EUSO-SPB2's Infrared Cloud Monitor*, Rebecca Diesing, et al., Proceedings of the 37th International Cosmic Ray Conference (ICRC 2021), arXiv:2112.09618
237. *The Fluorescence Telescope on board EUSO-SPB2 for the detection of Ultra High Energy Cosmic Rays*, G. Osteria, et al., Proceedings of the 37th International Cosmic Ray Conference (ICRC 2021), arXiv:2112.11130
238. *JEM-EUSO Collaboration contributions to the 37th International Cosmic Ray Conference*, G. Abdellaoui et al., JEM-EUSO Collaboration at the 37th International Cosmic Ray Conference (ICRC), held on July 12-23, 2021 (online) in Berlin, Germany. arXiv:2201.12246
239. *Ultra-High-Energy Cosmic Rays: The Intersection of the Cosmic and Energy Frontiers* A. Coleman, et al., solicited white paper for the 2021 Snowmass process arXiv:2205.05845

Books and Other Publications:

- *Consultant: Extraordinary Women Scientists*, by Darlene Stille (Children's Press 1995)
- *Editor: Proceedings of the XVIII Texas Symposium on Relativistic Astrophysics*, Ed. A. V. Olinto, J. Frieman, and D. N. Schramm, (World Scientific 1998).
- *Book review for Science of Cosmic Catastrophes: Supernovae, Gamma-Ray Bursts, and Adventures in Hyperspace* by J. Craig Wheeler (Cambridge University Press, 2000).
- *High Energy Astrophysics or Astrofisica delle alte energie in: Storia della scienza*, edited-in-chief Sandro Petruccioli, Roma, Istituto della Enciclopedia Italiana, 10 v., 2001-2004, v. IX, 2003, pp. 171-183.
- *Cosmic Rays contribution to the World Book Encyclopedia* (2005).
- *Nature's Puzzling Answers*, the 478th Convocation Address at the University of Chicago (27 August 2004).
- *Book Review for Physics Today of The Grand Design* by Stephen Hawking and Leonard Mlodinow (Bantam Books, New York, 2010).
- *Lives of Music and Physics, Lovingly Bound* by Neil Tesserov, 25 nov 2010, New York Times.
- *Cosmic Rays: A Century of Mysteries*, article celebrating 100 years of cosmic rays for Percorsi of Il Nuovo Saggiatore. Italian science magazine for the public.
- *Angela Olinto's cosmic needle in a haystack* by Delia O'Hara, AAAS profile, 12 June 2013 <https://www.aaas.org/blog/member-spotlight/angela-olintos-cosmic-needle-haystack>
- *Blazing the Trail: Essays by Leading Women in Science*, by Emma Ideal and Rhiannon Meharchand. Contributed a short essay about own life and career.
- *Cosmic Rays*, invited contribution to Astronomy Magazine, April issue 2014 (published February 24, 2014).
- *AAAC Report on Competed Grant Success Rates in US Astronomy and Astrophysics*, 15 march 2016.
- *NASA's New Probe Sails Into the Solar Wind. Its namesake, Eugene Parker, is a living legend of astrophysics*, Op-Ed in Wall Street Journal, August 9, 2018.