

Curriculum vitae

Current address

Gran Sasso Science Institute

Via Michele Iacobucci, 2, 67100 L'Aquila (Italy)

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Broad Areas of Research Interests

- Astroparticle Physics
- Galactic Cosmic Rays
- Gamma-ray and neutrino astrophysics
- Indirect detection of Dark Matter

Researcher unique ID: [0000-0002-6023-5253](https://orcid.org/0000-0002-6023-5253)

Education

- 2006–2010 PhD in Astrophysics
International School for Advanced Studies (SISSA), Trieste, Italy
Supervisor: Prof. Andrea Ferrara
Thesis: *The role of turbulence in interstellar and intergalactic environments.*
- 2003–2006 M. Sci. ("Laurea Magistrale") in Physics, Pisa University, Italy
Supervisors: Prof. V. Cavasinni and Dr. Dario Grasso
Thesis: *Diffuse neutrino emission from the Galaxy*
full-marks: 110/110 *cum laude*
- 1999–2003 B. Sc. ("Laurea") in Physics, Pisa University, Italy
Supervisor: Dr. A. Baldini
full-marks: 110/110

Peer-reviewed publication information

- 52 (22 as first author) publications on refereed Journals (weighted impact factor > 5.0) since 2007; > 3000 citations (> 600 normalised by author number); h-factor of 32 (source: [ADS Database](https://arxiv.org/abs/2402.01211))
- 2 publications on refereed Journals as member of the CTA collaboration
- 4 publications on refereed Journals as member of the Pierre Auger collaboration

Research Experiences

- 12/2022 – present** **Associate Professor**
Gran Sasso Science Institute (GSSI), L'Aquila, Italy
- 12/2019 – 11/2022 Assistant Professor
Gran Sasso Science Institute (GSSI), L'Aquila, Italy
- 10/2017 – 09/2019 Marie Skłodowska-Curie Fellow
Gran Sasso Science Institute (GSSI), L'Aquila, Italy
- 10/2015 – 09/2017 GSSI individual postdoctoral fellowship,
Gran Sasso Science Institute (GSSI), L'Aquila, Italy
- 10/2011–09/2015 Post-doctoral researcher (5 year contract) at the II. Institut für
Theoretische Physik, Universität Hamburg, Germany
- 07–09/2011 Visiting Scientist at Scuola Normale Superiore, Pisa, Italy
- 01–06/2011 Visiting Scientist at National Astronomical Observatory of China (NAOC),
Beijing, China

Teaching Experiences

2023 May	Undergraduate lectures on “Cosmic ray transport in the interstellar medium” at University of Bologna - 2 hours
2023 March	Graduate lectures on “Elementary Processes in Astroparticle Physics” at GSSI (L’Aquila) – 12 hours
2022 March	Graduate lectures on “Elementary Processes in Astroparticle Physics” at GSSI (L’Aquila) – 12 hours
2021 March	Graduate lectures on “Numerical Methods in Astroparticle Physics” at GSSI (L’Aquila) – 10 hours
2020 March	Graduate lectures on “Astrophysical Hydrodynamics” at GSSI (L’Aquila) – 10 hours
2018 February	Graduate lectures on “Numerical Methods in Astroparticle Physics” at GSSI (L’Aquila) – 10 hours
2017 May	Graduate lectures on “Indirect Dark Matter searches” at GSSI (L’Aquila) – 10 hours
2017 February	Graduate lectures on “Cosmic Rays Physics” at Scuola Normale Superiore (Pisa) - 8 hours
2014/2015 Winter Semester	Teaching Assistant for “General Theory of Relativity” (Lecturer: Prof. G. Sigl)
2013/14 Summer Semester	Teaching Assistant for “Cosmology” (Lecturer: Prof. Marcus Brüggen)
2013/14 Winter Semester	Teaching Assistant for “Thermodynamics and Statistical mechanics” (Lecturer: Prof. Gudrid Moortgat-Pick)
2012/13 Summer Semester	Teaching Assistant for “Theoretical Astrophysics and Cosmology” (Lecturers: Prof. W. Buchmüller and Prof. G. Sigl)
2012/13 Winter Semester	Teaching Assistant for ”General Theory of Relativity” (Lecturer: Prof. G. Sigl)
2011/12 Summer Semester	Teaching Assistant for ”Introduction to General Relativity” (Lecturer: Prof. R. Banerjee)

Grants

- 2022 National PI in the MIUR/PRO-3 Grant “High-energy processes in the Dark Ages” (125 kEuro)
- 2018-2021 Co-participation in the ASI/INAF Grant n. 2017-14-H.O. (first call 50 kEuro + second call 70 kEuro)
- 2017 Marie Skłodowska-Curie Fellow Grant (180 kEuro) funded by the European Union.
- 2011 Collaboration Fellowship (~9 kEuro) at the National Astronomical Observatory of China (NAOC) in Beijing funded by the Chinese Academy of Science (CAS).

Supplementary Experiences and Responsibilities

- Science Communication Prize awarded by the Italian Physical Society (2022) [[website](#)]
- Member of the AUGER collaboration in the L’Aquila group (2022-now)
- Grant Referee for Agence nationale de la recherche (ANR) (2021-now)
- Grant Referee for European Commission (Marie Skłodowska-Curie Actions) (2021-now)
- Grant Referee for Deutsche Forschungsgemeinschaft (DFG) (2018-now)
- Member of the CTA collaboration in the L’Aquila group (2015-2022)
- Elected Member of the German Helmholtz-Allianz Astroparticle Physics (HAP) Member Board (2012-2015)
- Manuscript Referee for: Astronomy & Astrophysics, The Astrophysical Journal, Astroparticle Physics, Journal of Cosmology and Astroparticle Physics, Monthly Notices of the Royal Astronomical Society, Physical Review D, Physical Review Letters (2011-now)
- Student Representative in the Administrative Council of SISSA (2009-2010)
- Member of the [IAPS](#) (International Association of Physics Students) Executive Committee (2005-2006)
- Member of the ANTARES collaboration in the Pisa group (2005-2006)
- Member of the [Italian Physical Society](#) (2002-now)
- Member of the [Italian Astronomical Society](#) (1999-now)

Organisation of Conferences and Meetings

- “TeV Particle Astrophysics 2023”, Napoli, Italy, September 11-15, 2023. **Local Organizing Committee** [[website](#)]
- “Cosmic Ray Anisotropy Workshop CRA2023”, Chicago, US, May 16-19, 2023. **International Scientific Organizing Committee** [[website](#)]
- “Enrico Fermi International School of Physics - Course 208”, Varenna, Italy, June 23-29, 2022. **Main Organizer and Member of the Scientific Committee** [[website](#)]
- “TeV Particle Astrophysics 2021”, remote, October 25-29, 2021. **Cosmic Rays Session Convener.**
- “Cosmic Ray Anisotropy Workshop CRA2019”, GSSI, L’Aquila, Italy, October 7-11, 2019. **Main Organizer and Member of the Scientific Committee** [[website](#)]
- “CV Congresso Nazionale della Società Italiana di Fisica”, GSSI, L’Aquila, Italy, September 23-27, 2019. **Member of the Local Organization Committee** [[website](#)]
- “Rencontres du Vietnam on Very High Energy Phenomena in the Universe”, Quy Nhon, Vietnam, August 12-18, 2018. **International Advisory Committee** [[website](#)]
- “CRATER: Cosmic RAYs Transport and Energetic Radiations”, GSSI, L’Aquila, Italy, May 28 - June 01, 2018. **Main Organizer and Member of the Scientific Committee** [[website](#)]
- “XVI INFN High-energy Physics Meeting”, Trieste, Italy, April 19-21, 2017. **Cosmology and Astroparticle Session Convener.** [[website](#)]
- “CASPAR: Codes in ASTroPARTicle Research”, Summer School for graduate students, Hamburg, Germany, September 10-15, 2014. **Main Organizer and Member of the Scientific Committee** [[website](#)]
- “14th ICATPP Conference”, Villa Olmo, Italy, September 23-27, 2013. **International Advisory Committee.**
- “CASPAR: Cosmic-rays Acceleration, Sources and Propagation, A Rendez-vous”, Hamburg, Germany, September 10-19, 2013. **Main Organizer and Member of the Scientific Committee** [[website](#)]
- Member of Local Organizing Committee for Colloquia at GSSI, 2018-2021.
- Member of Local Organizing Committee for Colloquia at SISSA, 2008-2010.

Conferences and Schools Attended

- *Exploring Galactic Cosmic Ray Accelerators with UHE γ -Rays*, Yerevan, Armenia, October 10-13, 2023. **Invited talk** [[website](#)]
- *Cosmic Ray Anisotropy Workshop CRA2023*, Chicago, US, May 16-19, 2023. **Review talk** [[website](#)]
- *Cosmic Rays in the Multi-Messenger Era*, Paris, France, December 5-7, 2022. **Invited talk** [[website](#)]
- *Neutrino Oscillation Workshop NOW2022*, Ostuni, Italy, September 4-11, 2022. **Invited talk** [[website](#)]
- *27th European Cosmic Ray Symposium*, Nijmegen, The Netherlands, July 25-29, 2022. **Invited talk** [[website](#)]
- *7th Heidelberg International Symposium on High-Energy Gamma-Ray Astronomy*, Barcelona, Spain, July 4-8, 2022. **Contributed talk** [[website](#)]

- *Solar Modulation and Dark Matter Workshop*, Trieste, Italy, November 14-19, 2021. **Invited talk** [[website](#)]
- *The Paris Saclay AstroParticle Symposium 2021*, Orsay (Paris), France, October 18-26, 2021. **Invited talk** [[website](#)]
- *1st Workshop on Gamma-ray Halos around Pulsars*, remote, December 1-3, 2020. **Invited talk** [[website](#)]
- *Multimessenger high energy astrophysics in the era of LHAASO*, remote, August 27-29, 2020. **Invited talk** [[website](#)]
- *Lomonosov Conference on Elementary Particle Physics*, Moscow, Russia, August 22-28, 2019. **Invited review talk** [[website](#)]
- *New direction in Galactic Magnetism*, Newcastle, UK, June 10-14, 2019. **Invited review talk** [[website](#)]
- *IMAGINE meeting*, Nijmegen, The Netherlands, April 2-5, 2019. **Invited review talk.**
- *Antideuteron 2019*, Los Angeles, US, March 27-29, 2019. **Invited talk** [[website](#)]
- *Searching for the sources of Galactic CRs*, Paris, France, December 10-14, 2018. **Invited talk** [[website](#)]
- *Cosmology 2018*, Dubrovnik, Croatia, October 22-27 2018. **Invited talk** [[website](#)]
- *4th CRISM conference*, Grenoble, France, June 25-29, 2018. Contributed talk.
- *Three elephants in the gamma-ray sky: Loop I, the Fermi bubbles, and the Galactic center excess*, Garmisch-Partenkirchen, Germany, October 21-24, 2017. **Invited talk** [[website](#)]
- *Cosmic-ray Anisotropy Workshop 2017*, Guadalajara, Mexico, October 10-13, 2017. **Invited review talk** [[website](#)]
- *Rencontres du Vietnam: Exploring the Dark Universe*, Quy Nhon, Vietnam, July 23-29, 2017. **Invited review talk.**
- *35th International Conference on Cosmic Rays (ICRC)*, Busan, South Korea, July 12-20, 2017. Poster contribution.
- *Searching for the sources of Galactic cosmic rays*, Paris, France, December 7-9, 2016. **Invited talk.**
- *2nd Workshop on Anisotropic Cosmic Ray Diffusion*, Montpellier, France, December 1-2, 2016. **Invited talk.**
- *CII Congresso Nazionale della Società Italiana di Fisica*, Padova, Italy, September 26-28, 2016. **Talk selected for the Special Mention: sif.it/attivita/congresso/102/comunicazioni.**
- *Cosmic Ray Origin Beyond the Standard Models*, San Vito di Cadore, Italy, September 19-23, 2016. Contributed talk.
- *TeVPA2016*, Geneva, Switzerland, September 12-16, 2016. Contributed talk.
- *Vulcano Workshop 2016*, Vulcano Island, Italy, May 22-28, 2016. **Invited talk.**
- *Physics of Cosmic Dawn and Reionization in the SKA Era*, Sesto, Italy, January 18-22, 2016. **Invited talk.**
- *Gamma rays and Dark Matter*, Obergurgl, Austria, December 7-11, 2015. **Invited talk.**
- *TeVPA2015*, Tokyo, Japan, October 26-30, 2015. **Invited talk.**
- *Dark Matter: Astrophysical Probes, Laboratory Tests, and Theory Aspects*, Munich, Germany, February 16-27, 2015. Contributed talk.

- *Cosmic-ray Anisotropy Workshop 2015*, Bad Honnef, Germany, January 26-30, 2015. **Invited talk.**
- *SUGAR 2015*, Geneva, Switzerland, January 21-23, 2015. Contributed Talk.
- *C Congresso della Società Italiana di Fisica*, Pisa, Italy, September 22-26, 2014. **Invited review talk.**
- *TeVPA 2014/iDM*, Amsterdam, The Netherlands, June 23-28, 2014. Contributed Talk.
- *The Dark Side of the Universe*, Trieste, Italy, October 14-17, 2013. Contributed Talk.
- *The future of dark matter astro-particle physics: insights and perspectives*, Trieste, Italy, October 8-11, 2013. **Invited talk.**
- *Anisotropic Universe*, Amsterdam, The Netherlands, September 25-27, 2013. Contributed Talk.
- *DarkAttack2012*, Ascona, Switzerland, July 15-20, 2012. Contributed Talk.
- *Epoch of Reionization 2012*, Strasbourg, France, April 23-27, 2012. Contributed Talk.
- *Multi-Messenger Astronomy of Cosmic Rays*, Beijing, China, April 11-14, 2011. **Invited talk.**
- *CRF 2010*, Hamburg, Germany, November 10-12 2010. **Invited talk** [[website](#)]
- *SciNeGHE 2010*, Trieste, Italy, September 8-10 2010. Contributed Talk.
- *GGI workshop on Dark Matter*, Florence, Italy, May 10-15 2010.
- *Cosmological Reionization*, Allahabad, India, February 16-20 2010. Contributed Talk.
- *The High Redshift Universe: A Multi-Wavelength View*, Aspen, Colorado, February 7-13 2010. Contributed Talk.
- *31st International Conference on Cosmic Rays (ICRC)*, Łódź, Poland, July 7-15 2009. Contributed Talk.
- *TANGO in PARIS*, Paris, France, May 4-6 2009. Poster Contribution.
- *Advanced School in High Performance and Grid Computing*, Trieste, Italy, November 3-14, 2008.
- *XXIVth IAP Colloquium: Far away, light in the Universe beyond redshift three*, Paris, France, July 7-11 2008. Poster Contribution.
- *AGN feedback workshop*, Vulcano, Italy, May 18-22 2008.
- *Astronomy in the next decade: synergies with SKA*, Bonn, Germany, April 14-18, 2008.
- *National School of Astrophysics: Galaxy clusters - Plasma astrophysics*, Trieste (TS), Italy, October 1-6, 2006.
- *XCII Congresso Nazionale della Società Italiana di Fisica*, Torino, Italy, September 18-23, 2006. Contributed Talk.
- *4th Workshop on Science with the New Generation of High Energy Gamma-ray Experiments*, Isola d'Elba, Italy, June 20-22, 2006.
- *National School of Astrophysics: Large field observational cosmology - Scale distance*, S.Agata sui due Golfi (NA), Italy, May 8-13, 2005.
- *National School of Astrophysics; Cosmological Parameters - Extrasolar Planets*, Asiago (VI), Italy, September 5-11, 2004.

Main Seminars and Colloquia

- December 12, 2023, Hamburg University, Hamburg, Germany
- March 27, 2023, Niels Bohr Institute, Copenhagen, Denmark

- September 19, 2022, University of Maryland, US (remote) [[slides](#)]
- June 2, 2022, Aachen University, Germany
- April 16, 2021, Princeton University, US (remote) [[slides](#)]
- November 17, 2020, APC, Paris, France (remote)
- July 7, 2020, INAF-Bologna University, Bologna, Italy (remote) [[slides](#)]
- June 20, 2019, IRAP, Toulouse, France [[slides](#)]
- November 21, 2017, DESY, Zeuthen-Berlin, Germany
- May 26, 2017, Institute for Radio-Astronomy, Bologna, Italy
- May 23, 2017, Tor Vergata University, Roma, Italy
- May 10, 2017, GRAPPA Institute, Amsterdam, The Netherlands
- February 28, 2017, INFN Section of Pisa, Pisa, Italy
- December 15, 2016, Innsbruck University, Innsbruck, Austria
- June 7, 2016, LUPM, Montpellier, France
- November 2, 2015, IPMU, Tokyo, Japan
- June 11, 2015, LAPTh, Annecy, France
- May 12, 2015, HITS, Heidelberg, Germany
- April 22, 2015, University of Oslo, Oslo, Norway
- May 14, 2014, Hamburger Sternwarte, Hamburg, Germany
- March 27, 2014, Laboratory of HEPC, Tallinn, Estonia
- March 8, 2013, Harvard-Smithsonian CfA, Cambridge, US
- March 6, 2013, NY University, New York, US
- November 5, 2012, Dark Cosmology Centre, Copenhagen, Denmark
- June 28, 2012, Max-Planck-Institut für Physik, Munich, Germany
- February 1, 2012, Göttingen University, Göttingen, Germany
- December 16, 2011, INFN Section of Pisa, Pisa, Italy
- April 26, 2011, Xiamen University, Xiamen, China
- March 10, 2011, Kavli Institute for Astronomy and Astrophysics, Beijing, China
- January 20, 2011, NAOC, Beijing, China
- September 16, 2010, DESY, Hamburg, Germany
- October 16, 2008, Arcetri Observatory, Firenze, Italy

Refereed Publications

52. B. Schroer, **C. Evoli** & P. Blasi, *TeV halos and the role of pulsar wind nebulae as sources of cosmic-ray positrons*, June 2023, Physical Review D, Volume 107, Issue 12, article id.123020 [[arXiv](#), [doi](#)]
51. P. De La Torre Luque, D. Gaggero, D. Grasso, O. Fornieri, K. Egberts, C. Steppa & **C. Evoli**, *Galactic diffuse gamma rays meet the PeV frontier*, April 2023, Astronomy & Astrophysics, Volume 672, id.A58 [[arXiv](#), [doi](#)]
50. **C. Evoli**, E. Amato, P. Blasi & R. Aloisio, *Stochastic nature of Galactic cosmic-ray sources*, December 2021, Physical Review D, Volume 104, Issue 12, article id.123029 [[arXiv](#), [doi](#)]
49. A. Dundović, **C. Evoli**, D. Gaggero & D. Grasso, *Simulating the Galactic Multi-messenger Emissions with HERMES*, September 2021, Astronomy & Astrophysics, Volume 653, id.A18, 16 pp. [[arXiv](#), [doi](#)]
48. P. Carenza, **C. Evoli**, M. Giannotti, A. Mirizzi & D. Montanino, *Turbulent axion-photon conversions in the Milky-Way*, July 2021, Physical Review D, Volume 104, Issue 2, article id.023003 [[arXiv](#), [doi](#)]
47. **C. Evoli**, E. Amato, P. Blasi & R. Aloisio, *Galactic factories of cosmic-ray electrons and positrons*, April 2021, Physical Review D, Volume 103, Issue 8, article id.083010 [[arXiv](#), [doi](#)]
46. B. Schroer, **C. Evoli** & P. Blasi, *Intermediate mass and heavy Galactic cosmic-ray nuclei: the case of new AMS-02 measurements*, June 2021, Physical Review D, Volume 103, Issue 12, article id.123010 [[arXiv](#), [doi](#)]
45. A. Dundovic, O. Pezzi, P. Blasi, **C. Evoli** & W. Matthaeus, *Novel aspects of cosmic ray diffusion in synthetic magnetic turbulence*, November 2020, Physical Review D, Volume 102, Issue 10, article id.103016 [[arXiv](#), [doi](#)]
44. P. von Doetinchem, **C. Evoli**, et al., *Cosmic-ray antinuclei as messengers of new physics: status and outlook for the new decade*, August 2020, Journal of Cosmology and Astroparticle Physics, Issue 08, article id. 035 [[arXiv](#), [doi](#)]
43. **C. Evoli**, P. Blasi, E. Amato & R. Aloisio, *Signature of Energy Losses on the Cosmic Ray Electron Spectrum*, July 2020, Physical Review Letters, Volume 125, Issue 5, article id. 051101 [[arXiv](#), [doi](#)] (Erratum: June 2021, Physical Review Letters, Volume 126, Issue 24, article id. 249901)
42. **C. Evoli**, G. Morlino, P. Blasi & R. Aloisio, *AMS-02 beryllium data and its implication for cosmic ray transport*, January 2020, Physical Review D, Volume 101, Issue 2, article id.023013 [[arXiv](#), [doi](#)]
41. C. Mascaretti, P. Blasi & **C. Evoli**, *Atmospheric neutrinos and the knee of the cosmic ray spectrum*, January 2020, Astroparticle Physics, Volume 114, p. 22-29 [[arXiv](#), [doi](#)]
40. S. Gabici, **C. Evoli**, D. Gaggero, P. Lipari, P. Mertsch, E. Orlando, A. Strong & A. Vittino, *The origin of Galactic cosmic rays: Challenges to the standard paradigm*, October 2019, International Journal of Modern Physics D, Volume 28, Issue 15, id. 1930022-339 [[arXiv](#), [doi](#)]
39. G. Galanti, F. Tavecchio, M. Roncadelli & **C. Evoli**, *Blazar VHE spectral alterations induced by photon-ALP oscillations*, July 2019, Monthly Notices of the Royal Astronomical Society, Volume 487, Issue 1, p.123-132 [[arXiv](#), [doi](#)]

38. **C. Evoli**, R. Aloisio & P. Blasi, *Galactic cosmic rays after the AMS-02 observations*, May 2019, Physical Review D, Volume 99, Issue 10, id.103023 [[arXiv](#), [doi](#)]
37. **C. Evoli**, T. Linden & G. Morlino, *Self-Generated Cosmic-Ray Confinement in TeV Halos: Implications for TeV Gamma-Ray Emission and the Positron Excess*, September 2018, Physical Review D, Volume 98, Issue 6, id.063017 [[arXiv](#), [doi](#)]
36. **C. Evoli**, P. Blasi, G. Morlino & R. Aloisio, *Origin of the Cosmic Ray Galactic Halo Driven by Advected Turbulence and Self-Generated Waves*, July 2018, Physical Review Letters, Volume 121, Issue 2, id.021102 [[arXiv](#), [doi](#)]
35. **C. Evoli**, D. Gaggero, A. Vittino, M. Di Mauro, D. Grasso & M.N. Mazziotta, *Cosmic-ray propagation with DRAGON2: II. Nuclear interactions with the interstellar gas*, July 2018, Journal of Cosmology and Astroparticle Physics, Issue 07, article id. 006 [[arXiv](#), [doi](#)]
34. S.S. Cerri, D. Gaggero, A. Vittino, **C. Evoli**, D. Grasso, *A signature of anisotropic cosmic-ray transport in the gamma-ray sky*, October 2017, Journal of Cosmology and Astroparticle Physics, Issue 10, article id. 019 [[arXiv](#), [doi](#)]
33. N. Leite, **C. Evoli**, M. D'Angelo, B. Ciardi, G. Sigl & A.Ferrara, *Do Cosmic Rays Heat the Early Intergalactic Medium?*, July 2017, Monthly Notices of the Royal Astronomical Society, Volume 469, Issue 1, p.416-424 [[arXiv](#), [doi](#)]
32. **C. Evoli**, D. Gaggero, A. Vittino, G. Di Bernardo, M. Di Mauro, A. Ligorini, P. Ullio & D. Grasso, *Cosmic-ray propagation with DRAGON2: I. numerical solver and astrophysical ingredients*, February 2017, Journal of Cosmology and Astroparticle Physics, Issue 02, article id. 015 [[arXiv](#), [doi](#)]
31. G. Pagliaroli, **C. Evoli** & F. Villante, *Expectations for high energy diffuse galactic neutrinos for different cosmic ray distributions*, November 2016, Journal of Cosmology and Astroparticle Physics, Issue 11, article id. 004 [[arXiv](#), [doi](#)]
30. R. Yang, F. Aharonian & **C. Evoli**, *Radial distribution of the diffuse gamma-ray emissivity in the galactic disk*, June 2016, Physical Review D, Volume 93, Issue 12, id.123007 [[arXiv](#), [doi](#)]
29. **C. Evoli**, M. Leo, A. Mirizzi & D. Montanino, *Reionization during the dark ages from a cosmic axion background*, May 2016, Journal of Cosmology and Astroparticle Physics, Issue 05, article id. 006 [[arXiv](#), [doi](#)]
28. **C. Evoli**, D. Gaggero & D. Grasso, *Secondary antiprotons as a Galactic Dark Matter probe*, December 2015, Journal of Cosmology and Astroparticle Physics, Issue 12, article id. 039 [[arXiv](#), [doi](#)]
27. I. Cholis, **C. Evoli**, F. Calore, T. Linden, C. Weniger & D. Hooper, *The Galactic Center GeV excess from a series of leptonic cosmic-ray outbursts*, December 2015, Journal of Cosmology and Astroparticle Physics, Issue 12, article id. 005 [[arXiv](#), [doi](#)]
26. A. Payez, **C. Evoli**, T. Fischer, M. Giannotti, A. Mirizzi & A. Ringwald, *Revisiting the SN1987A limit on light axion-like particles*, February 2015, Journal of Cosmology and Astroparticle Physics, Issue 02, article id. 006 [[arXiv](#), [doi](#)]

25. **C. Evoli**, A. Mesinger & A. Ferrara, *Unveiling the nature of dark matter with high redshift 21 cm line experiments*, November 2014, Journal of Cosmology and Astroparticle Physics, Issue 11, article id. 024 [[arXiv](#), [doi](#)]
24. F. de Gasperin, **C. Evoli**, M. Brüggen, A. Hektor, M. Cardillo, P. Thorman, W. A. Dawson & C. B. Morrison, *Discovery of the supernova remnant G351.0-5.4*, August 2014, Astronomy & Astrophysics, Volume 568, id. A107 [[arXiv](#), [doi](#)]
23. S. Pandolfi, **C. Evoli**, A. Ferrara & F. Villaescusa-Navarro, *Constraining Warm Dark Matter with high- z supernova lensing*, July 2014, Monthly Notices of the Royal Astronomical Society, Volume 442, Issue 1, p. 13-19 [[arXiv](#), [doi](#)]
22. D. Gaggero, D. Grasso, L. Maccione, G. Di Bernardo & **C. Evoli**, *PAMELA and AMS-02 positron and electron spectra are reproduced by 3-dimensional cosmic-ray modeling*, April 2014, Physical Review D, Volume 89, Issue 8, id. 083007 [[arXiv](#), [doi](#)]
21. **C. Evoli** & H. Yan, *Cosmic ray propagation in galactic turbulence*, February 2014, The Astrophysical Journal, Volume 782, Issue 1, article id. 36 [[arXiv](#), [doi](#)]
20. M. Tavakoli, I. Cholis, **C. Evoli** & P. Ullio, *Constraints on dark matter annihilations from diffuse gamma-ray emission in the Galaxy*, January 2014, Journal of Cosmology and Astroparticle Physics, Issue 01, article id. 017 [[arXiv](#), [doi](#)]
19. A. Pallottini, A. Ferrara & **C. Evoli**, *Simulating intergalactic quasar scintillation*, October 2013, Monthly Notices of the Royal Astronomical Society, Volume 434, Issue 4, p. 3293-3304 [[arXiv](#), [doi](#)]
18. **C. Evoli**, S. Pandolfi & A. Ferrara, *Cosmic microwave background constraints on light dark matter candidates*, August 2013, Monthly Notices of the Royal Astronomical Society, Volume 433, Issue 2, p. 1736-1744 [[arXiv](#), [doi](#)]
17. D. Gaggero, L. Maccione, G. Di Bernardo, **C. Evoli** & D. Grasso, *Three-Dimensional Model of Cosmic-Ray Lepton Propagation Reproduces Data from the Alpha Magnetic Spectrometer on the International Space Station*, July 2013, Physical Review Letters, vol. 111, Issue 2, id. 021102 [[arXiv](#), [doi](#)]
16. G. Di Bernardo, **C. Evoli**, D. Gaggero, D. Grasso & L. Maccione, *Cosmic Ray Electrons, Positrons and the Synchrotron emission of the Galaxy: consistent analysis and implications*, March 2013, Journal of Cosmology and Astroparticle Physics, Issue 03, article id. 036 [[arXiv](#), [doi](#)]
15. M. Valdés, **C. Evoli**, A. Mesinger, A. Ferrara & N. Yoshida, *The nature of dark matter from the global high redshift HI 21 cm signal*, February 2013, Monthly Notices of the Royal Astronomical Society, Volume 429, Issue 2, p. 1705-1716 [[arXiv](#), [doi](#)]
14. **C. Evoli**, I. Cholis, D. Grasso, L. Maccione & P. Ullio, *Antiprotons from dark matter annihilation in the Galaxy: astrophysical uncertainties*, June 2012, Physical Review D, vol. 85, Issue 12, id. 123511 [[arXiv](#), [doi](#)]
13. **C. Evoli**, D. Gaggero, D. Grasso & L. Maccione, *Common solution to the cosmic ray anisotropy and gradient problems*, May 2012, Physical Review Letters, vol. 108, Issue 21, id. 211102 [[arXiv](#), [doi](#)]

12. **C. Evoli**, M. Valdés, A. Ferrara & N. Yoshida, *Energy deposition by weakly interacting massive particles: a comprehensive study*, May 2012, Monthly Notices of the Royal Astronomical Society, Volume 422, Issue 1, pp. 420-433 [[doi](#)]
11. I. Cholis, M. Tavakoli, **C. Evoli**, L. Maccione & P. Ullio, *Diffuse Galactic Gamma Rays at intermediate and high latitudes. I. Constraints on the ISM properties*, May 2012, Journal of Cosmology and Astroparticle Physics, Issue 05, id. 004 [[arXiv](#), [doi](#)]
10. **C. Evoli**, P. Salucci, A. Lapi & L. Danese, *The HI Content of Local Late-Type Galaxies*, December 2011, The Astrophysical Journal, Volume 743, Issue 1, article id. 45 [[arXiv](#), [doi](#)]
9. **C. Evoli** & A. Ferrara, *Turbulence in the Intergalactic Medium*, June 2011, Monthly Notices of the Royal Astronomical Society, Volume 413, Issue 4, pp. 2721-2734 [[arXiv](#), [doi](#)]
8. G. Di Bernardo, **C. Evoli**, D. Gaggero, D. Grasso, L. Maccione & M. N. Mazziotta, *Implications of the cosmic ray electron spectrum and anisotropy measured with Fermi-LAT*, February 2011, Astroparticle Physics, Volume 34, Issue 7, p. 528-538 [[arXiv](#), [doi](#)]
7. G. Di Bernardo, **C. Evoli**, D. Gaggero, D. Grasso & L. Maccione, *Unified interpretation of cosmic-ray nuclei and antiproton recent measurements*, December 2010, Astroparticle Physics, Volume 34, Issue 5, p. 274-283 [[arXiv](#), [doi](#)]
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