

# Curriculum Vitae

Marco Regis

## Personal information

**Current Position:** Associate Professor

**Institution:** Università degli Studi di Torino

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**Date and place of birth:** 8th May 1980, Ivrea (Turin, Italy)

**Nationality:** Italian

## Education

- *Ph.D. in Astroparticle Physics*, October 2008

Advisor: Prof. P. Ullio

Opponent: Prof. M. Drees

Dissertation: Aspects of WIMP dark matter

S.I.S.S.A.-I.S.A.S., Trieste, Italy

- *M.Sc. in Theoretical Physics*, 110/110 cum laude, July 2004

Advisor: Prof. N. Fornengo

Dissertation: Kaluza-Klein dark matter

University of Turin, Italy

- *B.Sc. in Physics*, 110/110 cum laude, July 2002

University of Turin, Italy

## Fellowships awarded

- *Research contract*

Università degli Studi di Torino,  
1st November 2012-30th September 2020

- *Research fellowship*

by Istituto Nazionale di Fisica Nucleare,  
Sezione di Torino,  
1st December 2011-30th November 2013 (Interrupted on 31/10/2012)

- *Research fellowship*

by Università degli Studi di Torino,  
1st December 2010-30th November 2011

- *Free-standing postdoctoral fellowship*

by South-African National Research Foundation,  
at University of Cape Town,  
1st January 2010-31st December 2010

- *Postdoctoral Research Fellowship*

by Astronomy and Cosmology Consortium in South Africa,  
at University of Cape Town,  
1st November 2008-31st October 2010

- *Ph.D. studentship*

by S.I.S.S.A. (Astroparticle curriculum),  
1st November 2004-31st October 2008

## Grants/Awards

- Excellent Young PI (Call 01) - Progetto di Ricerca di Ateneo, Università degli Studi di Torino e Compagnia di San Paolo (External Peer Review by European Science Foundation): “The particle dark-matter quest in the extragalactic sky”, 49.918,00 Euro, 2015-2017.
- Principal Investigator of the Research grant funded by the agreement ASI-INAF n.2017-14-H.0, project “Deciphering the high-energy sky via cross correlation”, 25.000,00 + 8.000,00 Euro, 2017-2021.
- Co-Investigator of the project “From Darklight to Dark Matter: understanding the galaxy/matter connection to measure the Universe” No. 20179P3PKJ funded by MIUR (PRIN, Progetti di ricerca di rilevante interesse nazionale), 157.000,00 Euro (to my research unit), 2019-2022.

- Participant of the project “Departments of Excellence 2018 - 2022”, Grant of 8 MEuro awarded by MIUR (L. 232/2016) at the Physics Department of the University of Torino.
- Principal Investigator of the project “ALPs across the Alps” under the program “Grant for Internationalization” of the University of Torino, 11.000 Euro, 2023.

## **Teaching experience**

- Lectures on Introduction to Quantum Field Theory, M.Sc. in Physics, Università degli Studi di Torino, 2023.
- Lectures on Physics beyond the Standard Model, M.Sc. in Physics, Università degli Studi di Torino, 2022-2023.
- Lectures on Electromagnetism, B.Sc. in Geology, Università degli Studi di Torino, 2016-2023.
- Lectures on Dark Matter Physics, Ph.D. in Physics, Università degli Studi di Torino, 2022.
- Lectures on Quantum Mechanics, B.Sc. in Physics, Università degli Studi di Torino, 2020-2022.
- Lectures on Bayesian statistics, M.Sc. in Physics of Complex Systems, Università degli Studi di Torino, 2013-2020.
- Lectures on Physics (1st year), B.Sc. in Chemistry, Università degli Studi di Torino, 2012-2020.
- Tutoring and Demonstrating for Physics (1st year), B.Sc. in Mathematics, Università degli Studi di Torino, 2012-2016.
- Lectures on “Multi-wavelength and multi-messenger dark matter searches” at International School on AstroParticle Physics, 2014.
- Lectures on “Cosmic-rays and dark-matter indirect searches” at International Doctorate on AstroParticle Physics, 2012.
- Tutoring and Demonstrating for Electronics course (150 hours), B.Sc. in Physics, Università degli Studi di Torino, 2004

**Supervision of students:** Supervisor of two Ph.D. students (Astroparticle Physics), University of Turin, since 2015. Supervisor of three Master students (Theoretical Physics), University of Turin, since 2015. Supervisor of one Honours student (Astrophysics), University of Cape Town, 2010. Supervisor of six Bachelor students (Astrophysics and Theoretical Physics), University of Turin, since 2015. Opponent of eighteen Master students (Theoretical Physics, Astrophysics and Complex Systems), University of Turin, since 2012, and five Ph.D. students (Astroparticle Physics, Astrophysics and Statistics), since 2015.

**Reviewer:** Astronomy and Astrophysics Journal, The Astrophysical Journal, General Relativity and Gravitation, Frontiers in High-Energy and Astroparticle Physics, Journal of Cosmology and Astroparticle Physics, Physics Letters B, Monthly Notices of the Royal Astronomical Society, Physical Review D, Physical Review Letters.

**Editor:** Proceedings of the XIV International Conference on Topics in Astroparticle and Underground Physics, Editors: N. Fornengo, M. Regis, H.-S. Zechlin, Journal of Physics: Conference Series 718 (2016).

## Skills

Languages: Italian, maternal language. Good knowledge of English. Basic knowledge of French.

Computer programming: Good experience with C++, Fortran and Mathematica.

Science communication: Chapter on Cosmology in “Universo scienze” book (Flaccavento/Romano, Editor RCS), several outreach talks at public events and in schools.

## Organisation of scientific meetings

- *International School on AstroParticle Physics* (ISAPP) July 2014, Belgirate (Italy), LOC, 50 students.
- *Topics in Astroparticle and Underground Physics* (TAUP) September 2015, Turin (Italy), LOC, 490 participants.
- *Barolo Astroparticle Meeting* (BAM), September 2017, 2018, 2021, 2022, Barolo (Italy), Chair of the Organizing Committee, 30 participants.

## Visiting Scientist

- University of California, Santa Cruz (UCSC), United States, April 2010.
- Galileo Galilei Institute for Theoretical Physics, “Dark Matter: Its Origin, Nature and Prospects for Detection”, Arcetri, Italy, May 2010.
- Laboratoire de Physique Subatomique et de Cosmologie (LPSC), Grenoble, France, 2011-2013 (regular visitor).

- Instituto de Física Teórica UAM-CSIC, “Identification of Dark Matter with a Cross-Disciplinary Approach”, Madrid, May 2015.

## Large scale collaborations

- *Dark Matter in dSph*

Principal Investigator for the project “Radio Dark Matter Searches in Local Group Dwarf Spheroidal Galaxies”, which had been involving 9 researchers of 12 institutes, and obtained (from competitive calls) 123 (July 2011) + 30 (July 2016) observing hours with the Australian Telescope Compact Array, 20 observing hours with the South-African telescope KAT-7 (December 2015), and 25 observing hours with the Indian telescope Giant Metrewave Radio Telescope (September 2019) leading to 5 publications in international peer-reviewed journals.

- *Evolutionary Map of the Universe*

Member of the team of the project Evolutionary Map of the Universe (P.I.: Ray Norris, 1.5 years of telescope-time allocated) employing the Australian radio telescope ASKAP.

- *PRIN Projects*

Participant of the project “Theoretical Astroparticle Physics” funded by MIUR within the program “Programmi di Ricerca Scientifica di Rilevante Interesse Nazionale” (PRIN, call 2012). Participant of the project “Theoretical Astroparticle Physics” funded by MIUR within the program “Programmi di Ricerca Scientifica di Rilevante Interesse Nazionale” (PRIN, call 2015). Co-Investigator of the project “From Darklight to Dark Matter: understanding the galaxy/matter connection to measure the Universe” funded by MIUR within the program “Programmi di Ricerca Scientifica di Rilevante Interesse Nazionale” (PRIN, call 2017).

- *INFN initiative*

Participant of the “Theoretical Astroparticle Physics” (TAsP) initiative of the Istituto Nazionale di Fisica Nucleare (INFN), 2013-2023.

## Scientific talks

- *21 invited talks at international conferences and workshops*

(Identification of Dark Matter 2008 and 2014, TeV Particle Astrophysics 2009 and 2014, Frontier Objects in Astrophysics and Particle Physics 2010, Multifrequency Behaviour of High Energy Cosmic Sources 2011-2019, Roma International Conference on Astroparticle Physics 2016, European Physical Society Conference on High Energy Physics 2017, Radio Synchrotron Background Conference 2017, Dark Side of the Universe 2018, Particle Avenues in the Dark Universe Arena 2022, + workshops)

- *22 contributed talks at international conferences and workshops*

- *16 invited seminars/colloquia at national and international institutes*

(ICTP, University of Cape Town, University of Torino, CERN, University of California Santa

Cruz, LPSC Grenoble, MPI-AEI Potsdam, IFIC Valencia, SISSA, SKA office, University of the Witwatersrand, IRA-INAF Bologna, Perimeter Institute, University of Genova)

## Scientific papers

h-index = 30 [source: INSPIRE]

1. M. Regis, M. Serone and P. Ullio  
*A dark matter candidate from an extra (non-universal) dimension*  
JHEP **0703** (2007) 084 [arXiv:hep-ph/0612286].
2. M. Regis  
*Multi-wavelength signals from dark matter annihilation at the galactic center*  
Proceeding of Science, CARGESE2007 (2007) 020.
3. M. Regis and P. Ullio  
*Multi-wavelength signals of dark matter annihilations at the Galactic center*  
Phys. Rev. D **78** (2008) 043505 [arXiv:0802.0234 [hep-ph]].
4. M. Regis  
*Photons from Kaluza-Klein Dark Matter*  
Phys. Lett. B **663** (2008) 250 [arXiv:0803.0631 [hep-ph]].
5. M. Regis and P. Ullio  
*Testing the Dark Matter Interpretation of the PAMELA Excess through Measurements of the Galactic Diffuse Emission*  
Phys. Rev. D **80** (2009) 043525 [arXiv:0904.4645 [astro-ph.GA]].
6. M. Regis and P. Ullio  
*The contribution to the antimatter flux from individual dark matter substructures*  
arXiv:0907.5093 [astro-ph.GA].
7. M. Regis and C. Clarkson  
*Do primordial Lithium abundances imply there's no Dark Energy?*  
Gen. Rel. Grav. **44** (2012) 567 [arXiv:1003.1043 [astro-ph.CO]].
8. M. Regis  
*A test for the Dark Matter interpretation of the PAMELA positron excess with the FERMI telescope*  
Proceedings of the Fifth International Conference - Beyond 2010, World Scientific Book.
9. C. Clarkson and M. Regis  
*The Cosmic Microwave Background in an Inhomogeneous Universe*  
JCAP **1110** (2011) 013 [arXiv:1007.3443 [astro-ph.CO]].
10. M. Regis  
*Particle Dark Matter: the state of the art*  
Invited review contribution in Frontier Objects in Astrophysics and Particle Physics, F. Giovannelli and G. Mannocchi (eds.), Italian Physical Society, Editrice Compositori, [arXiv:1008.0506 [hep-ph]].

11. M. Regis  
*Galactic Magnetic Turbulence from Radio data*  
*Astroparticle Physics* **35** (2011) 170–176 [arXiv:1101.5524 [astro-ph.HE]].
12. M. Regis  
*The Cosmic Microwave Background in an Inhomogeneous Universe*  
Invited contribution in “Multifrequency Behaviour of High Energy Cosmic Sources - IX”, F. Giovannelli & L. Sabau-Graziati (eds.), *Mem. Soc. Ast. It.* **83** (2012) 67.
13. N. Fornengo, R. Lineros, M. Regis and M. Taoso  
*Possibility of a Dark Matter Interpretation for the Excess in Isotropic Radio Emission Reported by ARCADE*  
*Phys. Rev. Lett.* **107** (2011) 271302 [arXiv:1108.0569 [hep-ph]].
14. N. Fornengo, P. Panci and M. Regis  
*Long-Range Forces in Direct Dark Matter Searches*  
*Phys. Rev. D* **84** (2011) 115002 [arXiv:1108.4661 [hep-ph]].
15. M. Regis  
*Radio signals of particle dark matter*  
Proceedings of Science, EPS-HEP2011 062, Contribution to the 2011 Europhysics Conference on High Energy Physics (EPS-HEP 2011), Grenoble, July 21-27, 2011 [arXiv:1112.1881 [hep-ph]].
16. N. Fornengo, R. Lineros, M. Regis and M. Taoso  
*Galactic synchrotron emission from WIMPs at radio frequencies*  
*JCAP* **1201** (2012) 005 [arXiv:1110.4337 [astro-ph.GA]].
17. N. Fornengo, R. Lineros, M. Regis and M. Taoso  
*Cosmological Radio Emission induced by WIMP Dark Matter*  
*JCAP* **1203** (2012) 033 [arXiv:1112.4517 [astro-ph.CO]].
18. S. Camera, M. Fornasa, N. Fornengo and M. Regis  
*A Novel Approach in the Weakly Interacting Massive Particle Quest: Cross-correlation of Gamma-Ray Anisotropies and Cosmic Shear*  
*Astrophys. J.* **771** (2013) L5 [arXiv:1212.5018 [astro-ph.CO]].
19. M. Regis  
*A novel approach in the WIMP quest: Cross-correlation of gamma-rays and cosmic shear*  
Invited contribution in “Multifrequency Behaviour of High Energy Cosmic Sources - X”, 2014, *Acta Polytechnica CTU Proceedings*, Vol.1, No. 1 , F. Giovannelli & L. Sabau-Graziati (eds.).
20. W. C. Lim, M. Regis and C. Clarkson  
*Spherically symmetric cosmological spacetimes with dust and radiation - numerical implementation*  
*JCAP* **1310** (2013) 010 [arXiv:1308.0902 [astro-ph.CO]].
21. N. Fornengo and M. Regis  
*Particle dark matter searches in the anisotropic sky*  
*Front. Physics* **2** (2014) 6 [arXiv:1312.4835 [astro-ph.CO]].

22. N. Fornengo, R. A. Lineros, M. Regis and M. Taoso,  
*The isotropic radio background revisited*  
*JCAP* **1404** (2014) 008 [arXiv:1402.2218 [astro-ph.CO]].
23. M. Regis, L. Richter, S. Colafrancesco, M. Massardi, W. J. G. de Blok, S. Profumo and N. Orford,  
*Local Group dSph radio survey with ATCA (I): Observations and background sources*  
*Mon. Not. Roy. Astron. Soc.* **448** (2015) 4, 3731 [arXiv:1407.5479 [astro-ph.GA]].
24. M. Regis, L. Richter, S. Colafrancesco, S. Profumo, W. J. G. de Blok and M. Massardi,  
*Local Group dSph radio survey with ATCA (II): Non-thermal diffuse emission*  
*Mon. Not. Roy. Astron. Soc.* **448** (2015) 4, 3747 [arXiv:1407.5482 [astro-ph.GA]].
25. M. Regis, S. Colafrancesco, S. Profumo, W. J. G. de Blok, M. Massardi and L. Richter,  
*Local Group dSph radio survey with ATCA (III): Constraints on Particle Dark Matter*  
*JCAP* **1410** (2014) 016 [arXiv:1407.4948 [astro-ph.CO]].
26. N. Fornengo, L. Perotto, M. Regis and S. Camera,  
*Evidence of cross-correlation between the CMB lensing and the gamma-ray sky*  
*Astrophys. J.* **802** (2015) L1 [arXiv:1410.4997 [astro-ph.CO]].
27. S. Camera, M. Fornasa, N. Fornengo and M. Regis,  
*Tomographic-spectral approach for dark matter detection in the cross-correlation between cosmic shear and diffuse gamma-ray emission*  
*JCAP* **1506** (2015) 06, 029 [arXiv:1411.4651 [astro-ph.CO]].
28. S. Colafrancesco, M. Regis, P. Marchegiani, G. Beck, R. Beck, H. Zechlin, A. Lobanov and D. Horns,  
*Probing the nature of Dark Matter with the SKA*  
*PoS AASKA* **14** (2015) 100 [arXiv:1502.03738 [astro-ph.HE]].
29. M. Regis, J. Q. Xia, A. Cuoco, E. Branchini, N. Fornengo and M. Viel,  
*Particle dark matter searches outside the Local Group*  
*Phys. Rev. Lett.* **114** (2015) 24, 241301 [arXiv:1503.05922 [astro-ph.CO]].
30. M. Regis  
*Dwarf Spheroidal Galaxies: Searching for Diffuse Emission in the Darkest Structures*  
Invited contribution in “Multifrequency Behaviour of High Energy Cosmic Sources - XI”,  
F. Giovannelli & L. Sabau-Graziati (eds.), Proceedings of Science MULTIF15 (2015) 011.
31. A. Cuoco, J. Q. Xia, M. Regis, E. Branchini, N. Fornengo and M. Viel,  
*Dark matter searches in the gamma-ray extragalactic background via cross-correlations with galaxy catalogues*  
*Astrophys. J. Suppl.* **221** (2015) no.2, 29, [arXiv:1506.01030 [astro-ph.HE]].
32. S. Camera, M. Fornasa, N. Fornengo and M. Regis,  
*Detecting particle dark matter signatures by cross-correlating  $\gamma$ -ray anisotropies with weak lensing*  
*J. Phys. Conf. Ser.* **718** (2016) no.3, 032003.
33. H. S. Zechlin, A. Cuoco, F. Donato, N. Fornengo and M. Regis,  
*Statistical Measurement of the Gamma-ray Source-count Distribution as a Function of*

*Energy*

Astrophys. J. **826** (2016) no.2, L31 [arXiv:1605.04256 [astro-ph.HE]].

34. E. Branchini, S. Camera, A. Cuoco, N. Fornengo, M. Regis, M. Viel and J. Q. Xia,  
*Cross-correlating the gamma-ray sky with catalogs of galaxy clusters*  
Astrophys. J. Suppl. **228** (2017) no.1, 8 [arXiv:1612.05788 [astro-ph.CO]].
35. H. S. Zechlin, A. Cuoco, F. Donato, N. Fornengo and M. Regis,  
*Statistical measurement of the gamma-ray source-count distribution as a function of energy*  
AIP Conf. Proc. **1792** (2017) no.1, 070020.
36. M. Regis,  
*Particle dark matter: A multimessenger endeavour*  
Il Nuovo Cimento della Società Italiana di Fisica **40 C** (2017) no.1, 50.
37. T. Troster, S. Camera, M. Fornasa, M. Regis *et al.*,  
*Cross-correlation of weak lensing and gamma rays: implications for the nature of dark matter*  
Mon. Not. Roy. Astron. Soc. **467** (2017) 2706 [arXiv:1611.03554 [astro-ph.CO]].
38. S. Ando, M. Fornasa, N. Fornengo, M. Regis and H. S. Zechlin,  
*Astrophysical interpretation of the anisotropies in the unresolved gamma-ray background*  
Phys. Rev. D **95** (2017) no.12, 123006 [arXiv:1701.06988 [astro-ph.HE]].
39. M. Regis, L. Richter and S. Colafrancesco,  
*Dark matter in the Reticulum II dSph: a radio search*  
JCAP **1707** (2017) no.07, 025 [arXiv:1703.09921 [astro-ph.HE]].
40. M. Regis  
*Correlation between Gamma-ray Sky and Catalogs of Galaxies and Galaxy Clusters*  
Invited contribution in “Multifrequency Behaviour of High Energy Cosmic Sources - XII”,  
F. Giovannelli & L. Sabau-Graziati (eds.), Proceedings of Science MULTIF17 (2017) 015.
41. M. Regis  
*Intepreting extragalactic backgrounds via angular cross-correlations*  
Proceedings of ‘The European Physical Society Conference on High Energy Physics’,  
Proceedings of Science EPS-HEP2017 (2017) 023.
42. A. De Angelis *et al.* [e-ASTROGAM Collaboration],  
*Science with e-ASTROGAM (A space mission for MeV-GeV gamma-ray astrophysics)*  
JHEAp **19** (2018) 1, White Book, [arXiv:1711.01265 [astro-ph.HE]].
43. J. Singal *et al.*,  
*The Radio Synchrotron Background: Conference Summary and Report*  
Publ. Astron. Soc. Pac. **130** (2018) 985 [arXiv:1711.09979 [astro-ph.HE]].
44. S. Ammazzalorso, N. Fornengo, S. Horiuchi and M. Regis,  
*Characterizing the local gamma-ray Universe via angular cross-correlations*  
Phys. Rev. D **98** (2018) no.10, 103007 [arXiv:1808.09225 [astro-ph.CO]].
45. M. Ackermann *et al.* [Fermi-LAT Collaboration], S. Ammazzalorso, N. Fornengo, and  
M. Regis,

*Unresolved Gamma-Ray Sky through its Angular Power Spectrum*

Phys. Rev. Lett. **121** (2018) no.24, 241101 [arXiv:1812.02079 [astro-ph.HE]].

46. A. Weltman *et al.*,  
*Fundamental Physics with the Square Kilometer Array*  
Publications of the Astronomical Society of Australia, 37, E002 [arXiv:1810.02680 [astro-ph.CO]].
47. A. Caputo, M. Regis, M. Taoso and S. J. Witte,  
*Detecting the Stimulated Decay of Axions at Radio Frequencies*  
JCAP **1903** (2019) 027 [arXiv:1811.08436 [hep-ph]].
48. M. Colavincenzo, X. Tan, S. Ammazzalorso, S. Camera, M. Regis, J. Q. Xia and N. Fornengo,  
*Searching for gamma-ray emission from galaxy clusters at low redshift*  
Mon. Not. Roy. Astron. Soc. **491** (2020) no.3, 3225 [arXiv:1907.05264 [astro-ph.CO]].
49. S. Ammazzalorso, D. Gruen, M. Regis *et al.*,  
*Detection of cross-correlation between gravitational lensing and gamma rays*  
Phys. Rev. Lett. **124** (2020) no.10, 101102 [arXiv:1907.13484 [astro-ph.CO]].
50. E. Pinetti, S. Camera, N. Fornengo and M. Regis,  
*Synergies across the spectrum for particle dark matter indirect detection: how HI intensity mapping meets gamma rays*  
JCAP **2007** (2020) 044 [arXiv:1911.04989 [astro-ph.CO]].
51. A. Caputo, M. Regis and M. Taoso,  
*Searching for Sterile Neutrino with X-ray Intensity Mapping*  
JCAP **2003** (2020) 03 [arXiv:1911.09120 [astro-ph.CO]].
52. S. Manconi, M. Korsmeier, F. Donato, N. Fornengo, M. Regis and H. Zechlin,  
*Testing gamma-ray models of blazars in the extragalactic sky*  
Phys. Rev. D **101** (2020) no.10, 103026 [arXiv:1912.01622 [astro-ph.HE]].
53. G. Heald *et al.*,  
*Magnetism Science with the Square Kilometre Array*  
Galaxies **8** (2020) 3 [arXiv:2006.03172 [astro-ph.GA]].
54. S. Manconi, F. Donato, N. Fornengo, M. Korsmeier and M. Regis,  
*Probing the gamma-ray source populations with photon count statistics and anisotropies*  
PoS **ICRC2019** (2020), 581.
55. M. Regis, M. Taoso, D. Vaz, J. Brinchmann, S. L. Zoutendijk, N. Bouché and M. Steinmetz,  
*Searching for Light in the Darkness: Bounds on ALP Dark Matter with the optical MUSE-Faint survey*  
Phys. Lett. B **814** (2021) 136075, [arXiv:2009.01310 [astro-ph.CO]].
56. A. Caputo, A. Vittino, N. Fornengo, M. Regis and M. Taoso,  
*Searching for axion-like particle decay in the near-infrared background: an updated analysis*  
JCAP **05** (2021), 046, [arXiv:2012.09179 [astro-ph.CO]].

57. M. Regis, J. Reynoso-Cordova, M. D. Filipović, M. Brüggen, E. Carretti, J. Collier, A. M. Hopkins, E. Lenc, U. Maio and J. R. Marvil, *et al.*  
*The EMU view of the Large Magellanic Cloud: Troubles for sub-TeV WIMPs*  
*JCAP* **11** (2021), 046, [arXiv:2106.08025 [astro-ph.HE]].
58. M. Korsmeier, E. Pinetti, M. Negro, M. Regis and N. Fornengo,  
*Flat spectrum radio quasars and BL Lacs dominate the anisotropy of the unresolved gamma-ray background*  
*Astrophys. J.* **933** (2022) no.2, 221, [arXiv:2201.02634 [astro-ph.HE]].
59. S. Ando, S. Baum, M. Boylan-Kolchin, E. Bulbul, M. Burgess, I. Cholis, P. von Doetinchem, J. Fan, P. J. Harding and S. Horiuchi, *et al.*  
*Snowmass2021 Cosmic Frontier: Synergies between dark matter searches and multiwavelength/multimessenger astrophysics*  
arXiv:2203.06781 [hep-ph].
60. J. Reynoso-Cordova, M. Regis and M. Taoso,  
*Upper limits on the dark matter content in globular clusters*  
*JCAP* **10** (2022), 038, [arXiv:2203.13735 [astro-ph.GA]].
61. A. Caputo, M. Negro, M. Regis and M. Taoso,  
*Dark matter prospects with COSI: ALPs, PBHs and sub-GeV dark matter*  
*JCAP* **02** (2023), 006, [arXiv:2210.09310 [hep-ph]].
62. J. Singal, N. Fornengo, M. Regis, G. Bernardi, D. Bordenave, E. Branchini, N. Cappelluti, A. Caputo, I. P. Carucci and J. Chluba, *et al.*  
*The Second Radio Synchrotron Background Workshop: Conference Summary and Report*  
*Publ. Astron. Soc. Pac.* **135** (2023) no.1045, 036001, [arXiv:2211.16547 [astro-ph.CO]].
63. M. Regis, M. Korsmeier, G. Bernardi, G. Pignataro, J. Reynoso-Cordova and P. Ullio,  
*The self-confinement of electrons and positrons from dark matter*  
arXiv:2305.01999 [astro-ph.HE].