

# CV of Antonio Marinelli

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## Info

Antonio Marinelli  
born in Senigallia  
(AN), Italy  
25 February of  
1978

## Residence

Via le grotte N. 3,  
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## Actual position

RTD A  
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## Education

- 2005 **Laurea degree in Physics**, Dipartimento di Fisica, Università di Bologna, Italia, 11/03/2005, Thesis title: **Numerical simulation of the large scale structure of the Universe**, Supervisor: Prof. Lauro Moscardini
- 2006–2010 **PhD in Physics**, International School of Graduate Studies “Galileo Galilei”, Dipartimento di Fisica, Università di Pisa, Italia  
PhD degree obtained on 13/12/2010, Thesis title: **Discovery potential of AGNs with a Mediterranean neutrino telescope**, Supervisor: Prof. Mauro Morganti

## Academic Appointments

- 2022–now **Assistant Professor, Dipartimento di Fisica, Università Federico II, Napoli**, INFN Sezione di Napoli, INAF, OAC, Capodimonte Topic: **Neutrino Multimessenger studies and new detector geometries**, 01/05/2022 up to now
- 2020–2022 **INFN Senior Research Grant**, INFN Sezione di Napoli Topic: **Modeling of reservoir sources contribution to the measured extraterrestrial high-energy neutrino flux with a particular focus on the KM3NeT/ARCA perspectives**, 01/01/2020 up to 01/01/2022 (**24 months**)
- 2016–2019 **INFN Research Fellow** INFN Sezione di Pisa  
Topic: **Study of high energy neutrino emission from diffuse regions of our Galaxy and from most luminous blazars and computation of future KM3NeT/ARCA expectations**, 01/05/2016 - 01/09/2019 (**40 months**)
- 2016–2016 **Visiting Researcher** Department of Modern Physics, Lanzhou (Cina) & CAS (Chinese Academy of Science)  
Topic: **Exploring the capabilities of DAMPE to look for the Central Molecular Zone diffuse emission**, 01/02/2016 - 01/03/2016 (**1 month**), Host Professor: Jarah Evslin
- 2014–2015 **Galilei Postdoctoral Fellow** Dipartimento di Fisica, Università di Pisa & INFN Sezione di Pisa  
Topic: **Multimessenger study (gamma-ray and neutrino) of extragalactic high energy emitters**, 01/12/2014 - 01/12/2015 (**12 months**), Supervisor: Prof. Keniki Konishi
- 2013–2014 **Assistant Professor** Dipartimento di Fisica, Università Autonoma del Messico, UNAM, Città del Messico  
Topic: **Study of high energy neutrino expectations from a FR I type radiogalaxy**, from 01/11/2013 to 31/11/2014 (**13 months**)

- 2011–2013 **DGAPA Postdoctoral Fellowship** Dipartimento di Fisica, Università Autonoma del Messico, UNAM, Città del Messico  
Topic: **Scientific verification of the HAWC experiment**, from 01/11/2011 to 01/11/2013 (**24 months**), Supervisor: Dr. Ruben Alfaro
- 2011–2011 **Postdoctoral Scholarship** Dipartimento di Fisica, Università di Pisa  
Topic: **Calcolo della sensitivity del futuro KM3NeT per l'osservazione di Blazars**, from 01/01/2011 to 01/11/2011 (**10 Months**), Supervisor: Prof. Mauro Morganti
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## Coordinations and responsibilities in scientific projects

1. **Responsible** of the scientific verification of the gamma-ray prototype **VAMOS** for the **HAWC** collaboration 2012/2013
  2. **Responsible** of the section about neutrino studies on the project **ASI-INAF-INFN ADTS23 *A Modern Approach to Cosmic Ray Transport in the Galaxy*** 2017/2018
  3. **Responsible** of the section related to neutrino production on the project **ASI-INAF-INFN 2017-14-H.0 *MuTe: Multi-messenger Test of jetted-AGNs*** 2019/2020
  4. **Local Responsible** for the experiment KM3NeT at INFN section of Pisa **research activity and construction** 2017-2019
  5. **Local Responsible** for the experiment ANTARES at INFN section of Pisa **research activity** 2017-2019
  6. **Coordinator** of the KM3NeT/Napoli analysis group, detector expectations and data analysis. 2020-now
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## Financed projects

1. **Co-I** for the observational campaign Swift ToO (June 2014 - June 2015) : **SWIFT LOCALIZATION AND FOLLOW-UP OF HAWC TRANSIENTS** (50.000 dollars)
  2. **Co-I** for the observational campaign of the Large Millimetric Telescope ToO (January 2015 - December 2015):**A redshift survey of gamma-ray blazars tracing the extragalactic background light** (200.000 pesos)
  3. **Co-I** on the project **ASI-INAF-INFN ADTS23 *A Modern Approach to Cosmic Ray Transport in the Galaxy*** (50.000 euros)
  4. **PI** of the **TUBITAK** project: International fellowship for outstanding researcher; *Neutrino Emitters Modeling Realizing a undersea Telescope (NEMRUT)* (200.000 euro)
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## Distinctions and Patents

**Abilitation for being Associate Professor. Sector: 02/A1. EXPERIMENTAL PHYSICS OF FUNDAMENTAL INTERACTIONS, FROM 11/04/2018 TO 11/04/2028**

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## Publications (complete list at the end of the document)

**About 120** Refereed Publications (2 as a corresponding author for the experimental collaborations)(□30 phenomenological articles with few names) + **30** Refereed Proceedings,  $H_{index}=29$

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## Editorial responsibilities

**Member of the ANTARES Editorial Board**

**Referee for the journals: Science, The Astrophysical Journal, Astronomy and Astrophysics, European Journal of Physics, Nuclear Instrument and Methods**

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## Didactical Activity

2013-2014 **Teacher of the course "High Energy Astrophysics" for Master Students**, Astronomy department, Università UNAM (A.A. 2013-2014)

2016-2017 **Teacher of the intensive course "Non thermal emission mechanisms in the astrophysical sources and detection techniques" for PhD students**, Physics department, Università di Siena (A.A. 2017-2018 A.A. 2018-2019 A.A. 2019-2020 A.A. 2020-2021 A.A. 2021-2022)

2018-2019 **Teaching support for the course "Laboratory of Physics I"**, Physics department, Università di Pisa (A.A. 2017-2018 A.A. 2018-2019)

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## Educational outreach

- 2011-2013 Exposition of the research activities of the HAWC experiment at “Notte delle Stelle”, ed.2011, 2012, 2013, Città del Messico, UNAM
- 2015-2018 Exposition of the research activities of the KM3NeT experiment at “Notte dei ricercatori”, ed. 2015, 2016, 2017, 2018, Pisa, Università di Pisa
- 2018 Dissemination seminar on neutrino astronomy at “De Guate al Cosmo”, Quetzaltenango, 15 November 2018, Guatemala
- 2020 Dissemination seminar on neutrino physics and astrophysics at “El Universo en mi casa”, Asociación Científica de La Antigua Guatemala, 02 August 2020, Guatemala
- 2020 Dissemination seminar on neutrino astronomy at “Central American - Caribbean Bridge in Astrophysics Program”, 23 March 2021, Central America
- 2022 Seminar on neutrino astronomy at “Semana de la Carrera de Física 2022, Nabil Kawas”, Universidad Nacional Autónoma de Honduras, 11 November 2022, Tegucigalpa, Honduras

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## Mentoring experience

- 2020-2023 Co-supervisor of the PhD Thesis, Università “Vanvitelli”, Caserta Dipartimento di Fisica, “Study of Starburst galaxies observability through ARCA telescope and time calibration of detector units”, candidate: Walid Idrissi Ibsalikh
- 2020-2021 Co-supervisor of the Master Thesis, Università di Salerno, Dipartimento di Fisica, “Calibration of the KM3NeT detector and expectations for the diffuse flux measured by IceCube”, candidate: Maria Rosaria Musone
- 2019-2020 Co-supervisor of the Master Thesis, Università Federico II, Napoli, Dipartimento di Fisica, “Study of Neutrino Emission from Astrophysical Reservoirs”, candidate: Antonio Ambrosone
- 2016-2019 Supervisor of the PhD Thesis, Università di Pisa, Dipartimento di Fisica, “Study of neutrino emission from Blazars and expectations for the incoming KM3NeT/ARCA telescope”, candidate: Ankur Sharma
- 2015 Co-supervisor Bachelor Thesis, Università di Pisa, Dipartimento di Informatica, “Muon track fitting for KM3-IT experiment with GPU architecture”, candidate: Alessio Bacciarelli
- 2017 Supervisor Bachelor Thesis, Università di Pisa, Dipartimento di Fisica, “Study of atmospheric muon signal on a KM3NeT Optical Module and depth dependence”, candidate: Alessio Giuliani
- 2018 Co-supervisor Bachelor Thesis, Università San Carlos, Città del Guatemala, Dipartimento di Fisica e Astronomia, “Study of Duty Cycle for a sample of BL-Lacs objects through Fermi-LAT observations”, candidate: Mabel Osorio

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## Conference Talks as a speaker

1. Talk “Discovery potential of AGNs with a Mediterranean neutrino telescope”, Congress *From neutrino to multi messenger astronomy: status and perspective*. April 4 - 6, 2011, Marseille, France,
2. Talk “Scientific verification of High Altitude Water Cherenkov observatory”, *RICAP13*, May 24 - 26, 2013, Rome, Italy
3. Talk “The HAWC observatory: new perspectives of gamma-ray astronomy”, 66th Fujihara Seminar, *X-raying the gamma-ray universe*, November 3 - 6, 2013, Tokyo, Japan
4. Talk “Very high energy neutrino expectation from Fanaroff-Riley I sources”, IAU Symposium 313, *Extragalactic jets from every angles*, September 15 - 19, 2014, Puerto Ayora, Galapagos Islands
5. Talk “A hadronic scenario for the Galactic Ridge”, *ICRC2015*, July 30 - August 6, 2015, The Hague, Netherland
6. Talk “The Galactic diffuse neutrino emission: a new comprehensive scenario”, *VIVnT2015*, September 14 -16, 2015, Rome, Italy
7. Talk “Modeling the Galactic center emission from GeV to PeV” *RICAP16* June 21 - 24, 2016, Frascati, Italy
8. Talk “Astrophysical interpretation of Extraterrestrial neutrino excess measured by IceCube experiment” *SILAFAE2016* November 14 - 18, 2016, Antigua, Guatemala
9. Talk “High Energy Neutrino expectations from the Central Molecular Zone” *ICRC2017* July 12 - 20, 2017, Busan, South Korea
10. Talk “Diffuse High Energy neutrino factories in our Galaxy”, *PAHEN2017* September 23 - 25, 2017, Naples, Italy
11. Talk “Diffuse Galactic neutrinos: expectations and experimental upper limits” *MIAPP2018* February 26 - March 23, 2018, Garching, Germany
12. Talk “Anagraphical picture of high-energy Galactic neutrinos”, *RICAP2018* September 4 - 7 September, 2018, Rome, Italy
13. Talk “Exploring the activity of blazars and their observability through a neutrino telescope” *Extreme 2019* January 22 - 25, 2019, Padua, Italy
14. Talk “Reservoir Sources, implications for high-energy neutrinos” *Cosmic Rays and Neutrinos in the Multi-Messenger Era* December 7-11.2020, APC online mode, Paris
15. Talk “KM3NeT/ARCA expectations in view of a novel multi-messenger study of starburst galaxies” *VIVnT2021* May 18-21.2021, Valencia, online mode
16. Talk “A novel multi-messenger study of Starburst galaxies: implications for neutrino astronomy” *ICRC2021* July 12-23.2021, Berlin, online mode
17. Talk “A novel multi-messenger analysis of Starburst galaxies: implications for neutrino astronomy” *ECRS2022* July 25-29.2022, Nijmegen, Netherland
18. Talk “Acoustic Neutrino Detection In a Adriatic Multidisciplinary Observatory (ANDI-AMO)” *ECRS2022* July 25-29.2022, Nijmegen, Netherland

19. Talk “A novel multi-messenger picture for Starburst galaxies: implications for neutrino astronomy” *IWARA2022* September 5-9.2022, Antigua Guatemala, Guatemala
  20. Talk “A novel multimessenger study of Starburst galaxies: implications for neutrino astronomy” *CRIS2022* September 12-16.2022, Napoli, Italy
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## Conference Posters

1. Poster “Detection of VHE neutrinos with undersea telescopes” Meeting of Italian society of Physics SAIT, 2009 Pisa, Italy.
  2. Poster “How many Ultra-High Energy cosmic rays could we expect from Centaurus A?” In: The Physics of astronomical transient, January 21-27, 2012
  3. Poster “Lepton-hadronic processes and high-energy neutrinos in NGC 1275 Extragalactic jets from every angles”, September 15-19, 2014. Puerto Ayora, Ecuador
  4. Poster “Hadronic flares and associated neutrinos for Markarian 421 Extragalactic jets from every angles”, September 15 - 19, 2014. Puerto Ayora, Ecuador
  5. Poster “Correlation of high energy neutrinos and gamma rays on the direction of Fermi Bubbles”, July 24th - August 1st, 2019, Madison, WI, ICRC 2019
  6. Poster “KM3NeT/ARCA Expectations for the Low Latitude Bubbles”, July 24th - August 1st, 2019, Madison, WI, ICRC 2019
  7. Poster “Time-Dependent Sensitivity and Discovery Potential of KM3NeT-ARCA to TXS 0506+056”, July 24th - August 1st, 2019, Madison, WI, ICRC 2019
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## Invited Talks

1. A.Marinelli, “Discovery potential of AGN neutrino sources through a mediterranean undersea Cherenkov telescope”, July 14, 2011. KIT, Karlsruhe, Germany
2. A.Marinelli, “From MILAGRO to HAWC: perspectives for gamma-ray astronomy”, July 3, 2012, I.N.F.N. Colloquium, Pisa, Italy
3. A.Marinelli, “The HAWC Observatory: New Perspectives for very high energy Astrophysics”, December 19, 2013, Astrophysics Colloquium, Chukurova University, Adana, Turkey
4. A.Marinelli, “Neutrino expectation from the Galactic ridge”, November 5, 2015, CEA, Saclay, France
5. A.Marinelli, “Interpretation of Astrophysical neutrinos observed by IceCube experiment” March 9, 2016, IMP-CAS, Lanzhou, China
6. A.Marinelli, “Bounding Galactic and extra-Galactic spectral components in the IceCube measurements” April 12, 2016, DIAS, Dublin, Ireland
7. A.Marinelli, “Astrophysical interpretation of extraterrestrial neutrino flux measured by IceCube experiment” April 27, 2016, UNAM, Institute of Astronomy, DF, Mexico
8. A.Marinelli, “Searching for the origin of the last catalog of extraterrestrial neutrinos observed by IceCube” September 27, 2017, Dipartimento di Fisica, “E.Pancini”, Naples, Italy

9. A.Marinelli, "The astrophysical signal observed by IceCube: shedding light on possible neutrino emitters" November 6. 2018, Physics Department, University of San Carlos, Guatemala City
10. A.Marinelli, "Exploring the activity of Blazars and their observability through a neutrino telescope", October 17.2019, INFN section of Naples.
11. A.Marinelli, "The astrophysical signal observed by IceCube: shedding light on possible neutrino emitters", January 07.2020, Bagazici University, Istanbul, Turkey
12. A.Marinelli, "The Astrophysical interpretation of extraterrestrial neutrino flux measured by IceCube and ANTARES experiments", January 09.2020, Mimar Sinan Fine Arts University, Istanbul, Turkey
13. A.Marinelli, "Cosmic Reservoirs : the importance of CTA to understand high-energy neutrino observations", OAS Very High Energy Meeting, June, 8-9.2022, Bologna, Italy
14. A.Marinelli, "A novel multimessenger study of Starburst galaxies: implications for neutrino astronomy", 2nd KM3NeT Town Hall Meeting, September 20-22.2022, Catania, Italy
15. A.Marinelli, "Neutrino astronomy in the era of the Global Neutrino Network", Third Gravi/Gamma Workshop, October 5-7 2022, Volterra, Italy

## Conferences Organization

1. Organization (**and LOC**) member of the **workshop "SciNeGhe"**, 2016, Pisa, Italia.
2. Organization (**and SOC**) member of the **workshop "2nd Town Hall Meeting"**, 2022, Catania, Italy

## Collaborations

1. UNAM - Instituto di Astronomia, Città del Messico, Nissim Fraija, Magda Gonzalez
2. UNAM - Instituto di Fisica, Città del Messico, Hermes Leon Vargas, Andrés Sandoval
3. USAC - Instituto di Fisica, Città del Guatemala, Rodrigo Sacahui Reyes
4. Università di Cracovia, Sabrina Casanova
5. Università di Lanzhou, CAS, Cina, Jarah Evslin
6. Università Autonoma di Madrid, Instituto di Fisica, Daniele Gaggero
7. Full member of the ANTARES collaboration (100 members distributed on 25 countries)
8. Full member of the KM3NeT collaboration (more than 200 members distributed on 32 countries)
9. Full member of the Hyper-Kamiokande collaboration (around 500 members)
10. Associated member of the HAWC collaboration (80 members distributed on 4 countries)

## Hardware and software skills

1. C++ , C, Fortran77, Fortran90, Python
2. MathLab, ROOT
3. Fermi-Tools, Genhen,

## Spoken languages

1. Italian, Mother tongue
  2. Inglese, Fluent spoken and written
  3. Spagnolo, Fluent spoken and written
  4. Francese, Scholastic spoken and written
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## Research Activity

### 1. High Energy neutrino studies

I started to work on this scientific

topic since my PhD at Galilei School of Pisa University. The phenomenological studies I did were dedicated to the estimation of hadronic emission from radio galaxies FR-I type, known BL-Lac objects and Galactic diffuse component. The focus on radio galaxies was mainly devoted to Cen A, M87 and NGC1275, with a deep investigation of the high-energy gamma-ray spectral features. Different assumptions were made considering the gamma-ray observations obtained in the MeV-GeV range by satellite telescopes (like Fermi-LAT and AGILE) and at TeV scale by imaging Cherenkov telescopes. The expected neutrino counterpart was modeled, for few scenarios assumed, with a focused investigation on the observability of the expected flux with the TeV-PeV neutrino observatories. The study of neutrino emission from BL-Lacs was focused on the estimation of hadronic duty cycle for this particular class of highly variable objects. For this purpose, long term gamma-ray observations were taken into account to obtain high and low activity periods. In this case, data from Fermi-LAT, H.E.S.S., MAGIC, VERITAS and MILAGRO were considered. On the other hand, the study of diffuse neutrino emission from our Galaxy was mostly related to the effects of a new comprehensive scenario for cosmic-ray transport. We introduced this new model to explain the diffuse Galactic gamma-ray emission measured by Fermi-LAT telescope at more than 10 GeV and the MILAGRO excess at 15 TeV. An upper limit for Galactic diffuse neutrino expectation was set considering different cases of gas and source distributions. I also coordinated the analyses done by ANTARES and IceCube experiments to set the experimental upper limits on the maximal diffuse Galactic contribution to a possible dishomogeneity between the astrophysical neutrino flux measured from the Northern hemisphere and the one measured from the Southern. In parallel to the phenomenological activity done, I was the team leader, at Pisa University, of the collaborations KM3NeT and ANTARES from 2016 up to 2019. I coordinated also the local experimental activities related to these two experiments with tasks related to the raw data analysis and construction activities. In 2020 I moved at INFN of Naples and Federico II University with a specific duty of coordinating the astrophysical activities of astroparticle group and acting as a liaison between the experimental KM3NeT local group and the Theoretical and phenomenological group. From last year a special Multimessenger (gamma-ray and neutrino) focus was devoted to the neutrino emission from "reservoir" sources with a dedicated expectation study for the incoming KM3NeT experiment. Since 2020 I am also a new full member of the new Hyper-Kamiokande collaboration.

### 2. High Energy gamma-ray studies

My experimental activity on gamma rays started at UNAM, participating in the construction and data analysis phases of the HAWC experiment. I was responsible for the scientific verification of detector geometry, obtained through the comparison between Monte Carlo and



data, during the initial phases of this telescope, when a prototype called VAMOS was built for this purpose. I obtained the expectations for the HAWC detector to observe some particular AGNs and also analyzed the Markarian 421 spectral energy distribution (SED) using the data of MILAGRO experiment. As of now, several proposals have been finalized for the comparison of HAWC gamma-ray data with X-ray and optical polarimetry observations. I was Co-I of a ToO proposal about the Swift X-ray follow-up of flares observed by the HAWC experiment with an approved amount of 50000 dollars. During the past years I also used the Fermi-LAT data to obtain the SEDs of diffuse gamma-ray emission from different regions of our Galaxy using Fermi tools. These SEDs were used to tune the Model of diffuse Galactic emission. In particular we linked the Fermi-LAT and H.E.S.S. observations around the Galactic center using the newly introduced Cosmic-ray transport scenario.

3. **Studies done about the cosmic rays** I started the study of Ultra High Energy cosmic rays at UNAM with the multi-wavelength analysis of FR-I radio-galaxies using data from IceCube, imaging Cherenkov telescopes, and Telescope Array and Auger. In the recent years I also focused on PeV Galactic cosmic rays connecting the model of cosmic-ray transport introduced at the beginning, with the expectations of gamma-ray and neutrino from different regions of the Galactic plane. This phenomenological approach gives a possible explanation of the long-standing problem of the 15 TeV MILAGRO excess and set upper limits for the Galactic diffuse neutrino expectation. With the last IceCube-ANTARES joint template

fitting analysis we obtain the most stringent upper limit on diffuse Galactic neutrino component, at the level of 1/10 of the total flux measured by IceCube. For the phenomenological part of this research, we have obtained a grant of 50000 euros from ASI-INAF-INFN in 2018, creating a network between Pisa, GSSI, SISSA Universities and Arcetri observatory.

## Publications

- [1] Review of the online analyses of multi-messenger alerts and electromagnetic transient events with the ANTARES neutrino telescope  
A. Albert, ANTARES Collaboration. [arXiv e-prints, arXiv:2211.07551 \(Nov. 2022\) arXiv:2211.07551. 2022. arXiv: 2211.07551 \[astro-ph.HE\]](#)
- [2] Starburst Nuclei as Light Dark Matter Laboratories  
Antonio Ambrosone, Marco Chianese, Damiano F. G. Fiorillo, Antonio Marinelli, Gennaro Miele. [arXiv e-prints, arXiv:2210.05685 \(Oct. 2022\) arXiv:2210.05685. 2022. arXiv: 2210.05685 \[astro-ph.HE\]](#)
- [3] Observable signatures of cosmic rays transport in Starburst Galaxies on gamma-ray and neutrino observations  
Antonio Ambrosone, Marco Chianese, Damiano F. G. Fiorillo, Antonio Marinelli, Gennaro Miele. [Monthly Notices of the Royal Astronomical Society, 515,4 \(Oct. 2022\) pp. 5389–5399. 2022. DOI: 10.1093/mnras/stac2133. arXiv: 2203.03642 \[astro-ph.HE\]](#)
- [4] Prospects for detection of a galactic diffuse neutrino flux  
P. De La Torre Luque, D. Gaggero, D. Grasso, A. Marinelli. [Frontiers in Astronomy and Space Sciences, 9, 1041838 \(Oct. 2022\) p. 1041838. 2022. DOI: 10.3389/fspas.2022.1041838. arXiv: 2209.10011 \[astro-ph.HE\]](#)
- [5] Acoustic neutrino detection in a Adriatic multidisciplinary observatory (ANDIAMO)  
Antonio Marinelli, Pasquale Migliozi, Andreino Simonelli. [Astroparticle Physics, 143, 102760 \(Oct. 2022\) p. 102760. 2022. DOI: 10.1016/j.astropartphys.2022.102760. arXiv: 2109.15199 \[astro-ph.IM\]](#)

- [6] Search for Gamma-Ray and Neutrino Coincidences Using HAWC and ANTARES Data  
H. A. Ayala Solares, ANTARES Collaboration, HAWC Collaboration. *arXiv e-prints*, [arXiv:2209.13462](#) (Sept. 2022) *arXiv:2209.13462*. 2022. *arXiv: 2209.13462 [astro-ph.HE]*
- [7] Limits on the nuclearite flux using the ANTARES neutrino telescope  
ANTARES Collaboration. *arXiv e-prints*, [arXiv:2208.11689](#) (Aug. 2022) *arXiv:2208.11689*. 2022. *arXiv: 2208.11689 [astro-ph.HE]*
- [8] Search for Spatial Correlations of Neutrinos with Ultra-high-energy Cosmic Rays  
A. Albert, ANTARES collaboration, IceCube Collaboration, Pierre Auger Collaboration, Telescope Array Collaboration. *The Astrophysical Journal*, **934**,2, 164 (Aug. 2022) p. 164. 2022. DOI: 10.3847/1538-4357/ac6def. *arXiv: 2201.07313 [astro-ph.HE]*
- [9] The KM3NeT multi-PMT optical module  
S. Aiello, KM3NeT Collaboration. *Journal of Instrumentation*, **17**,7, P07038 (July 2022) P07038. 2022. DOI: 10.1088/1748-0221/17/07/P07038
- [10] Search for non-standard neutrino interactions with 10 years of ANTARES data  
ANTARES Collaboration. *Journal of High Energy Physics*, **2022**,7, 48 (July 2022) p. 48. 2022. DOI: 10.1007/JHEP07(2022)048
- [11] Search for magnetic monopoles with ten years of the ANTARES neutrino telescope  
A. Albert, ANTARES Collaboration. *Journal of High Energy Astrophysics*, **34**, (June 2022) pp. 1–8. 2022. DOI: 10.1016/j.jheap.2022.03.001. *arXiv: 2202.13786 [astro-ph.HE]*
- [12] Search for secluded dark matter towards the Galactic Centre with the ANTARES neutrino telescope  
A. Albert, ANTARES Collaboration. *Journal of Cosmology and Astroparticle Physics*, **2022**,6, 028 (June 2022) p. 028. 2022. DOI: 10.1088/1475-7516/2022/06/028. *arXiv: 2203.06029 [astro-ph.HE]*
- [13] Search for solar atmospheric neutrinos with the ANTARES neutrino telescope  
A. Albert, ANTARES Collaboration. *Journal of Cosmology and Astroparticle Physics*, **2022**,6, 018 (June 2022) p. 018. 2022. DOI: 10.1088/1475-7516/2022/06/018. *arXiv: 2201.11642 [astro-ph.HE]*
- [14] Implementation and first results of the KM3NeT real-time core-collapse supernova neutrino search  
KM3NeT Collaboration, S. Aiello, A. Albert, M. Alshamsi, S. Alves Garre, Z. Aly, A. Ambrosone. *European Physical Journal C*, **82**,4, 317 (Apr. 2022) p. 317. 2022. DOI: 10.1140/epjc/s10052-022-10137-y
- [15] Combined sensitivity of JUNO and KM3NeT/ORCA to the neutrino mass ordering  
KM3NeT Collaboration, S. Aiello, A. Albert, M. Alshamsi, S. Alves Garre, Z. Aly. *Journal of High Energy Physics*, **2022**,3, 55 (Mar. 2022) p. 55. 2022. DOI: 10.1007/JHEP03(2022)055
- [16] Determining the neutrino mass ordering and oscillation parameters with KM3NeT/ORCA  
S. Aiello, KM3NeT Collaboration. *European Physical Journal C*, **82**,1, 26 (Jan. 2022) p. 26. 2022. DOI: 10.1140/epjc/s10052-021-09893-0. *arXiv: 2103.09885 [hep-ex]*
- [17] KM3NeT/ARCA expectations in view of a novel multimessenger study of starburst galaxies

Antonio Marinelli. *JINST*, **16**,12 (2021) p. C12016. 2021. DOI: 10.1088/1748-0221/16/12/C12016. *arXiv*: 2108.00176 [*astro-ph.HE*]

. [18] Could Nearby Star-forming Galaxies Light Up the Pointlike Neutrino Sky?  
Antonio Ambrosone, Marco Chianese, Damiano F. G. Fiorillo, Antonio Marinelli, Gennaro Miele. *Astrophys. J. Lett.*, **919**,2 (2021) p. L32. 2021. DOI: 10.3847/2041-8213/ac25ff. *arXiv*: 2106.13248 [*astro-ph.HE*]

. [19] Study of Blazar Activity in 10 year Fermi-LAT Data and Implications for TeV Neutrino Expectations  
J. R. Sacahui, A. V. Penacchioni, A. Marinelli, A. Sharma, M. Castro, J. M. Osorio, M. A. Morales. *Revista Mexicana de Astronomía y Astrofísica*, **57**, (Oct. 2021) p. 251. 2021. DOI: 10.22201/ia.01851101p.2021.57.02.01. *arXiv*: 2011.13043 [*astro-ph.HE*]

. [20] Analysing the gamma-ray activity of neutrino emitter candidates: comparing TXS 0506+056 with other blazars  
Antonio Marinelli, J. Rodrigo Sacahui, Ankur Sharma, Mabel Osorio-Archila. *Monthly Notices of the Royal Astronomical Society*, **506**,3 (Sept. 2021) pp. 3760–3772. 2021. DOI: 10.1093/mnras/stab1312. *arXiv*: 1909.13198 [*astro-ph.HE*]

. [21] Studying Bioluminescence Flashes with the ANTARES Deep Sea Neutrino Telescope  
N. Reeb, S. Hutschenreuter, P. Zehetner, T. Ensslin, ANTARES Collaboration. *arXiv e-prints*, *arXiv*:2107.08063 (July 2021) *arXiv*:2107.08063. 2021. *arXiv*: 2107.08063 [*physics.aos-ph*]

. [22] Sensitivity to light sterile neutrino mixing parameters with KM3NeT/ORCA  
KM3NeT Collaboration, S. Aiello, A. Albert, S. Alves Garre, Z. Aly, A. Ambrosone, F. Ameli, M. Andre. *arXiv e-prints*, *arXiv*:2107.00344 (July 2021) *arXiv*:2107.00344. 2021. *arXiv*: 2107.00344 [*hep-ex*]

. [23] Supernova Model Discrimination with Hyper-Kamiokande  
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