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### EDUCATION:

2014 Ph.D. in ENVIRONMENTAL SCIENCES: MARINE ENVIRONMENT & RESOURCES

University of Messina - Department of Animal Biology and Marine Ecology

*Underwater Acoustics/Signal Processing/Marine Mammals/Marine Technologies*

Istituto Nazionale di Fisica Nucleare - Laboratori Nazionali del Sud (INFN - LNS)

2014 GUEST Ph.D. STUDENT at Woods Hole Oceanographic Institution (WHOI)

Gori Fellowship 2014, Department of Biology & Department of Geophysics

2010 M.Sc. in BIOLOGY AND ECOLOGY OF MARINE COASTAL ENVIRONMENT

University of Messina - Department of Animal Biology and Marine Ecology

Istituto Nazionale di Fisica Nucleare - Laboratori Nazionali del Sud (INFN - LNS)

2007 B.Sc. in MARINE BIOLOGY AND ECOLOGY

University of Messina - Department of Animal Biology and Marine Ecology

Interdisciplinary Center for Bioacoustics and Environmental Research (CIBRA), University of Pavia

### PROFESSIONAL EXPERIENCE:

2021 Research Staff, Stazione Zoologica Anton Dohrn (SZN), Napoli, Italy

2017-present Postdoctoral Researcher, Institute of Deep-sea Science and Engineering (IDSSE), Chinese Academy of Sciences, *Marine Mammal and Marine Bioacoustics Lab*, Sanya, China

2017 Postdoctoral Investigator, Woods Hole Oceanographic Institution (WHOI), *Sensory Ecology and Bioacoustics Lab*, Woods Hole, MA, United States

2016 Researcher, MAGINOT project (*Integrated system for monitoring and protection of the urban, suburban and marine environments*) at National Research Council (IAMC-CNR), Italy

2015 Guest Investigator, Woods Hole Oceanographic Institution (WHOI), Departments of Biology and Applied Ocean Physics and Engineering, Woods Hole, MA, United States

2015 External Collaborator, Management of Marine Cabled Stations at IAMC-CNR (National Research Council), *Bioacoustics Lab*, Trapani, Italy

2014 Researcher, EMSO – MedIT project (*European Multidisciplinary Seafloor & water column Observatory*) at National Research Council (IAMC-CNR), Italy

### RELEVANT PEER-REVIEW PUBLICATIONS (last 5 years):

- Lin M, Liu M, **Caruso F** et al. (2020). A pioneering survey of deep-diving and off-shore cetaceans in the northern South China Sea. *Integrative Zoology* 00, 1–11. DOI: 10.1111/1749-4877.12508 (2019 IF: 2.514).
- Rosso M, Lin M, **Caruso F** et al. (2020). First live sighting of Deraniyagala's beaked whale (*Mesoplodon hotaula*) or ginkgo-toothed beaked whale (*Mesoplodon ginkgodens*) in the western Pacific (South China Sea) with preliminary data on coloration, natural markings and surfacing patterns. *Integrative Zoology* 00, 1–11. DOI: 10.1111/1749-4877.12507 (2019 IF: 2.514).
- Caruso F**, Hickmott L, Warren JD et al. (2020). Diel differences in blue whale (*Balaenoptera musculus*) dive behavior increase nighttime risk of ship strikes in northern Chilean Patagonia. *Integrative Zoology* 00, 1–18. DOI: 10.1111/1749-4877.12501 (2019 IF: 2.514).
- Wanxue Xu, Lijun Dong, **Francesco Caruso** et al. (2020). Long-term and large-scale spatiotemporal patterns of soundscape in a tropical habitat of the Indo-Pacific humpback dolphin (*Sousa chinensis*). *PLoS ONE* 15(8):e0236938. DOI: 10.1371/journal.pone.0236938 (2019 IF: 2.740).
- Songhai Li, Mingli Lin, **Francesco Caruso** et al. (2020). Cetaceans under threat in South China Sea. *Science*;

- 368(6495):1074-1075. DOI: 10.1126/science.abc7557 (2019 IF: 20.570).
6. **Francesco Caruso** et al. (2020). Influence of acoustic habitat variation on Indo-Pacific humpback dolphin (*Sousa chinensis*) in shallow waters of Hainan Island, China. *The Journal of the Acoustical Society of America*, 147(6):3871-3882. DOI: 10.1121/10.0001384. (2019 IF: 1.780).
  7. **Francesco Caruso**, et al. (2020). Monitoring of a Nearshore Small Dolphin Species Using Passive Acoustic Platforms and Supervised Machine Learning Techniques. Methods Article, *Frontiers in Marine Science*. doi:10.3389/fmars.2020.00267. (2019 IF: 3.086).
  8. Mingli Lin, **Francesco Caruso**, et al. (2019). Food-mortality risk trade-off in the Indo-Pacific humpback dolphin (*Sousa chinensis*). *Aquatic Conserv: Mar Freshw Ecosyst*, 1-8.doi.org/10.1002/aqc.3280. (2019 IF: 2.935).
  9. Genevieve Flaspoehler, **Francesco Caruso** et al. (2019). Locomotion patterns of the veined squid (*Loligo forbesi*) using bio-logging tags. *J Exp Biol*. doi: 10.1242/jeb.198226. (2018/2019 IF: 3.017).
  10. Elena Papale, Giuseppe Alonge, **Francesco Caruso** et al. (2019). The higher, the closer, the better? Influence of sampling frequency and distance on the acoustic properties of short-beaked common dolphins burst pulses in the Mediterranean Sea. *Aquatic Conserv: Mar Freshw Ecosyst*. doi: 10.1002/aqc.3158. (2019 IF: 2.935).
  11. **Francesco Caruso**, Virginia Sciacca, et al. (2019). Acoustic recordings of rough-toothed dolphin offshore Eastern Sicily (Mediterranean Sea). *J. Acoust. Soc. Am.*, 146, doi: 10.1121/1.5126118. (2018 IF: 1.605).
  12. Lijun Dong, **Francesco Caruso**, et al. (2019). Whistles emitted by Indo-Pacific humpback dolphins (*Sousa chinensis*) in Zhanjiang waters, China. *J. Acoust. Soc. Am.* 145 (6), doi: 10.1121/1.5110304. (2018 IF: 1.605).
  13. Zining Gong, Lijun Dong, Mingli Lin, Mingming Liu, **Francesco Caruso**, et al. (2019) Echolocation signals of free-ranging pantropical spotted dolphins (*Stenella attenuata*) in the South China Sea. *J. Acoust. Soc. Am.* 145 (6), doi: 10.1121/1.5111742. (2018 IF: 1.605).
  14. Ashlee Lillis, **Francesco Caruso**, et al. (2018). Drifting hydrophones as an ecologically meaningful approach to underwater soundscape measurement in coastal benthic habitats. *Journal of Ecoacoustics*. 2: #STBDH1. doi: 10.22261/JEA.STBDH1.
  15. Maria Ceraulo, Elena Papale, **Francesco Caruso** et al. (2018). Acoustic comparison of a patchy Mediterranean shallow water seascape: Posidonia oceanica meadow and sandy bottom habitats. *Ecological Indicators*, 85:1030–1043. doi: 10.1016/j.ecolind.2017.08.066. (2017/2018 IF: 3.983).
  16. **Francesco Caruso** et al. (2017). Long-Term Monitoring of Dolphin Biosonar Activity in Deep Pelagic Waters of the Mediterranean Sea. *Scientific Reports*, 7: 4321, doi:10.1038/s41598-017-04608-6. (2017/2018 IF: 4.122).
  17. Salvatore Viola, [...], **Francesco Caruso**, et al. (2017). Continuous monitoring of noise levels in the Gulf of Catania (Ionian Sea). Study of correlation with ship traffic. *Marine Pollution Bulletin*, 121:97–103. doi: 10.1016/j.marpolbul.2017.05.040. (2017 IF: 3.099).
  18. Jacopo Aguzzi, [...], **Francesco Caruso** et al. (2017). Inertial bioluminescence rhythms at the Capo Passero (KM3NeT-Italia) site, Central Mediterranean Sea. *Scientific Reports*, 7:44938, doi: 10.1038/srep44938. (2017/2018 IF: 4.122).
  19. **Francesco Caruso** et al. (2016). Detection and Tracking of Fin Whales During Seismic Exploration in the Gulf of California. *Proceedings of Meetings on Acoustics*, 27, 070021 (2016). doi: 10.1121/2.0000424.
  20. Virginia Sciacca, Salvatore Viola, **Francesco Caruso**, et al. (2016). Shipping Noise and Seismic Airgun Surveys in the Ionian Sea: Long Term Observations and Potential Impact on Mediterranean Fin Whale. *Proceedings of Meetings on Acoustics*, 27, 040010. doi: 10.1121/2.0000311.
  21. Alessandro Bocconcelli [...], **Francesco Caruso**, et al. (2016). DTAG studies of blue whales (Balaenoptera musculus) in the Gulf of Corcovado, Chile. *Proceedings of Meetings on Acoustics*, 27, 040002. doi: 10.1121/2.0000269.
  22. Giuseppa Buscaino, [...], **Francesco Caruso**, et al. (2016). Temporal patterns in the soundscape of the shallow waters of a Mediterranean marine protected area. *Scientific Report*, 6, 34230; doi: 10.1038/srep34230. (2015 IF: 5.228).
  23. Silvia Adrián-Martínez, [...], **Francesco Caruso**, et al. for the KM3NeT Collaboration (2016). Long term monitoring of the optical background in the Capo Passero deep-sea site with the NEMO tower prototype. *The European Physical Journal C*, 76:68 doi 10.1140/epjc/s10052-016-3908-0. (2016 IF: 5.084).
  24. C. Distefano, [...], **F. Caruso** et al. for the KM3NeT Collaboration (2016). Measurement of the atmospheric muon flux at 3500 m depth with the NEMO Phase-2 detector. *The European Physical Journal Web of Conferences* 121, 05015, DOI: 10.1051/epjconf/201612105015.
  25. Silvia Adrián-Martínez, [...], **Francesco Caruso**, et al. for the KM3NeT Collaboration (2016). The prototype detection unit of the KM3NeT detector. *The European Physical Journal C*, 76:54. doi: 10.1140/epjc/s10052-015-3868-9. (2016 IF: 5.084).
  26. **Francesco Caruso**, et al. (2015). Size Distribution of Sperm Whales Acoustically Identified During Long Term Deep-Sea Monitoring in the Ionian Sea. *PLoS ONE* 10(12): e0144503. doi: 10.1371/journal.pone.0144503. (2014 IF: 3.234).
  27. Virginia Sciacca, **Francesco Caruso**, et al. (2015). Annual Acoustic Presence of Fin Whale (*Balaenoptera physalus*) Offshore Eastern Sicily, Central Mediterranean Sea. *PLoS ONE* 10(11): e0141838. doi: 10.1371/journal.pone.0141838. (2014 IF: 3.234).
  28. Sebastiano Aiello, [...], **Francesco Caruso** et al. (2015). Measurement of the atmospheric muon depth intensity relation with the NEMO Phase-2 tower. *Astroparticle Physics*, Vol. 66, Pag. 1-7, 2015. doi: 10.1016/j.astropartphys.2014.12.010. (2014 Impact Factor: 4.450).