

Bio-Pics



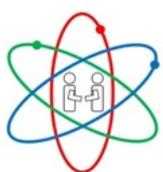
Alice Affatati has a background in Engineering and she has worked in the acoustic telemetry and bioacoustics field in South Africa and Namibia, focusing on studying the movement ecology of cetaceans and great white sharks (*Carcharodon carcharias*). She has been investigating marine bioacoustics, oceanography, and underwater noise topics at GEOMAR (Germany), at the Laboratory of Applied Bioacoustics (Spain), at the National Institute of Oceanography and Applied Geophysics – OGS (Italy) and at Memorial University (Canada). She was part of a group of experts on the effects of underwater noise in the Arctic Ecosystem in the Framework on the United Nations Decade of Ocean Science for

Sustainable Development in the Arctic Ocean and she is now involved in several international projects focusing on underwater noise and its effect on marine fauna. She is currently a Ph.D. student at the University of Trieste and OGS with scientific interest on the study of underwater noise from seismic surveys and its effects on marine fauna.



Vasileios Basios is a senior researcher in complex systems, interdisciplinary physics, with over 25 years in research and teaching. He is conducting research in the foundations of complexity science and nonlinear systems, in self-organization of complex matter. He serves as an adviser for research projects and as research faculty in international graduate schools on Complexity and Non-linear dynamics. He worked on self-organization and a new paradigm of nucleation/aggregation in nano-materials (proteins and zeolites) with the team of Prof. G. Nicolis at ULB sponsored by the European Space Agency (ESA). That was a biotechnology initiative for the in-orbit laboratory of the ProMISS and

GCB experiments on Thermodynamic and Statistical Mechanical Aspects of Protein Crystallization and Pattern Formation in Reaction-diffusion systems. He also organized and led panel discussions of ESA Topical Teams, workshops and conferences on complexity science. The issue of collective dynamics in living and non-living matter is a focal interest of his current studies and in collaboration with the team of Prof. Yukio-Pegio Gunji at Tokyo's Waseda University, they have developed a novel approach to Bayesian inference, called "Bayesian and Inverse Bayesian inference" (BiB), that has furnished novel insights especially on the area of biological information processing. He has extensive experience in large scale simulations and modelling of nonlinear and stochastic systems, neural networks, Monte-Carlo methods and Bayesian inference for nonlinear complex systems. In addition, he is engaged in addressing varied and diverse audiences from learned specialists to laymen and students on the theme of complexity, philosophy of science and the history of scientific ideas, related to complex systems' science. During his formative years he was tutored by Ilya Prigogine (Nobel Laureate) and Grégoire Nicolis at ULB, where he got his PhD, after studying with John S. Nicolis "cybernetics" at the University of Patras.





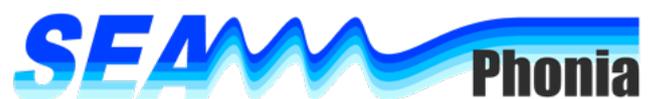
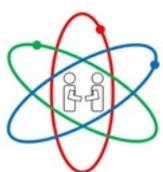
Junio Fabrizio Borsani is a professional with 37+ years professional experience. Trained zoologist. Specialized in underwater acoustics within the Italian Navy (submarine force) as well as academia. Employed in various Italian universities and government agencies. From January 2012 to January 2015, he was senior Underwater Noise/Sound specialist and Scientific Lead in Underwater Acoustics at CEFAS/DEFRA, UK. February 2015 to present he is senior research specialist with the National Institute for Environmental Protection and Research (ISPRA), Rome, Italy. His latest work has addressed potential risks for the marine environment derived from shipping noise as well as from renewable

energies, oil&gas and coastal development. He provides expert advice on underwater noise to the MMO (Marine Mammal Organization), the CSSEG (Clean and Safe Sea Evidence Group) in the UK and advises into expert groups for the IMO, MSFD (EU Technical Subgroup on Noise, TGNoise Co-Chair), OSPAR, ICES and the Central Dredging Association (CEDA). Senior consultant to the Italian Government Ministry of the Environment and Energy Safety (MASE) in underwater noise related matters. Member of the steering committee of the Pelagos International Sanctuary for Whales and Dolphins in the Ligurian Sea. Main areas of expertise include: a) Marine noise regulations and policy, b) Impacts of man-made noise on marine biota, c) Environmental Impacts Assessment with respect to underwater sound, d) Marine Bioacoustics, e) Design and development of marine acoustic instruments, f) marine sound experiments design.



Giovanni Felici graduated in Statistics from Sapienza University of Rome in 1989. He has earned the degree of Master of Science in Operations Research and Operations Management at the University of Lancaster, UK, in 1991. In 1995, he successfully defended his doctorate with a dissertation in Operations Research at Sapienza University of Rome. Since 1994 he has been carrying out his research activities at the Cnr-Institute of Systems Analysis and Informatics "A. Ruberti", where he obtained the position of tenured researcher in 2000, the post of senior researcher in 2007 and the post of Research Executive in 2019. Since May 2022 he assumed the position of Director of the Institute. From 2016 to

April 2022, he was seconded to the Executive Agency of the European Council Research in Brussels to support the selection procedures for ERC call winners in the Mathematics and Computer Science Panels. He specializes in Operations Research, Mathematical Programming, Integer Programming, Logic Programming and Data Mining. He is active in basic and applied research on models and Data Mining algorithms, optimization techniques, complex production processes and knowledge transfer to private enterprises. He collaborates with several research groups in bioinformatics and bioengineering for the application of logical data mining algorithms for knowledge extraction from genomic data, participating in and leading research projects funded at national and European level. He has been a consultant for several public institutions and private companies in the field of operations research and optimization and has taught Operations Research Operations, Data Mining and Machine Learning in several universities and companies at both the undergraduate and postgraduate level. He is Editor for the area of Data Analytics and Machine Learning of the Springer Journal Soft Computing. He is the author of more than 90 publications in leading international scientific journals, refereed special issues, conference proceedings, and book chapters.





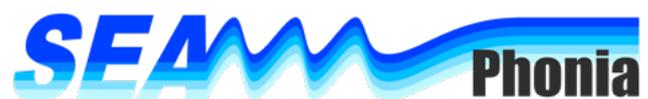
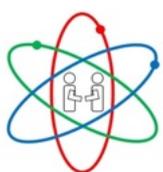
Laura Macchi is full professor (2002-present) of Psychology of Thought, Decision Making and Communication at the University of Milano-Bicocca. Her main research interests are in the study of decision-making processes, probabilistic reasoning, problem solving and communication, with application implications for communication and public policy. She has developed, in collaboration with M. Bagassi and G. Mosconi, psychoretoric, an approach to the study of thought that considers the intimate connection between language and thought to explain how we think, why we fall into error and how we solve problems. She is the author of numerous articles published in international journals and as well as

several books, including *Thinking: Psychological Perspectives on Reasoning, Judgment and Decision Making* (Wiley, 2003), *Human rationality and Cognitive Unconscious* (The MIT Press, 2016), *Insight and Creative Problem Solving* (Routledge, 2018), *Behavioral Analysis of Public Policy* (Il Mulino, 2021), and the recent *La psicoretorica. From the Art of Saying to the form of thought* (Raffaello Cortina, 2024). He is scientific leader of an international project funded by the European Community (EDUS4EL- Education Strategies for Environmental Literacy) on the development of critical and argumentative thinking with regard to the topic of climate change. She is chairman of the International Conference on Thinking 2024, University of Milan-Bicocca



Marta Picciulin holds a degree in Biology (1999), a PhD in Biomonitoring of the human-generated environmental pressures of Environmental Alteration (2004) from the University of Trieste (Italy) and a Masters Degree in Science Communication from the International School for Advanced Studies (SISSA, Trieste, Italy). Actually she is a research fellow at the National Research Council (CNR-ISMAR, Venice, Italy) and in this context she has been involved in the EU Interreg IT-HR Soundscape and Undersea projects, with the aim of monitoring the underwater noise pollution in the Adriatic Sea, and the H2020 SATURN focussing on the underwater noise pollution mitigation. Since 2000, her research topics

include marine ethology and bioacoustics. More recently, she focused her research interests on the effects (behaviour, ecology, physiology) of anthropogenic noise on marine mammals and fish. She is part of the Advisory Committee of the international conference *The Effects of Noise on Aquatic Life* and is a reviewer of several International Scientific Journals (ISI Journal) in the field of Marine Science and Underwater Noise Pollution. She is co-Author of more than 50 scientific publications (international Journals, proceedings, books, project/technical reports) on the above mentioned topics.

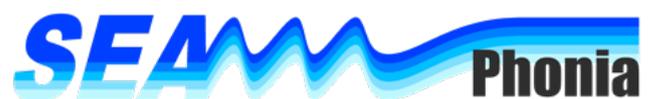
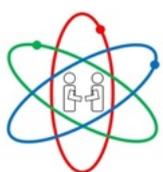




Marta Manca Zeichen is a senior researcher at Italian National Institute for Environmental Protection and Research (ISPRA) with 20 years of experience working in a diverse range of research areas such as marine ecology, biological and satellite oceanography. She holds a degree in Biological Sciences (University La Sapienza, Rome, Italy), a MSc in Integrated Environmental Sciences and a PhD in Civil Engineering and the Environment (University of Southampton, UK). Since 2000 she was contracted as a research scientist at the Italian Central Institute for Applied Marine Research (ICRAM), her research activity focused mainly on monitoring and managing Marine Protected Areas (MPAs) and marine protected species by means of satellite oceanographic data. Since 2008 she works at ISPRA as researcher in the field of biological, bio-geochemical and satellite oceanography studying ecosystem functioning, the anthropogenic impacts and effects on marine ecosystems. She has been working in a diverse range of research areas such as ocean acidification, maritime spatial planning and the detection of tsunami events in the Mediterranean and on the promotion of information and risk awareness. At present she is the scientific responsible of the first permanent ISPRA in-continuous monitoring station of Ocean Acidification in the Tyrrhenian Sea. She also involved in the EuroGOOS Ocean Literacy Working Group.



Pier Francesco Moretti is a physicist with two PhDs, more than 90 international publications in helioseismology, material, marine and political sciences. His skills in research were mainly focused in spectroscopy, data analysis and innovative technologies. He has been involved in many international projects and Governmental Boards, working also in USA, Antarctica, Austria and Belgium. He has been responsible of the Office for the International Activities of the CNR Department of Earth and Environment, and appointed also as scientific officer at the CNR Liaison Office in Brussels for the support to policy decisions. He has been vice-chair of the Research Working Party of the EU Competitiveness Council during the Italian Presidency of the European Union. He designed and coordinates an innovative training course for decision and negotiation processes (school4sid.cnr.it) and a foresight initiative for the development of a new generation of materials. Recently, he proposed an observing strategy and an experimental set-up for the acquisition and analysis of underwater acoustic signals and their role in the equilibrium of the ecosystems. See also www.pierfrancescomoretti.eu.





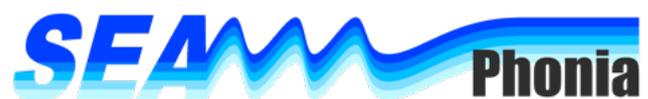
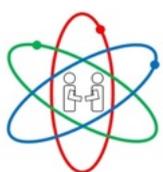
Chiara Petrioli is founder and CEO of WSense, the Blue Economy deep-tech company that pioneered and is leading the Internet of Underwater Things revolution. A computer engineer and researcher, among the “Top 2% World Scientists” for Stanford University, she is leading the scale-up that the World Economic Forum identified as the world's most innovative company in the collection and management of Big Data to monitor and protect marine ecosystems, environments that can absorb 1/3 of the Co2 produced by human activities and fight, in this way, climate change. After an experience abroad as a Fulbrighter, Petrioli returned to Italy and became a full professor, director of three

laboratories, and then Pro-Rector of the “Sapienza” University of Rome with responsibility for business incubation, a position she held until her appointment as WSense’s CEO, a spin-off she founded with a group of young talents. An international excellence as pioneer in wireless submarine networks and IoT of the deep, WSense is one of the top Italian companies for innovation (100 Italian Excellence 2020), a Blue Invest Award 2022 winner from the European Commission, among the top 5 European deep-tech scale-ups (EIT Digital Challenge 2022), and has just been selected by the Commission and the European Investment Bank as one of the EU's 20 Blue Champions. Among the most cited international researchers in computer science and engineering, Chiara Petrioli has received several innovation awards, including the prestigious IEEE Fellowship. Her frontier technologies have been covered by CNN, National Geographic, and the BBC. In December 2023, Petrioli joined the Board of the European Innovation Council (EIC), a body established by the European Commission to support cutting-edge innovation, technology transfer, and developing and enhancing breakthrough technologies at the European level.



Angela Pomaro is a researcher at the Institute of Marine Sciences of the National Research Council of Italy, in Venice. Graduated in civil engineering at the University of Padua in 2007, she develops research activities with particular interest on wave climate studies focusing on the understanding of the interdependencies of local meteo-oceanographic conditions with large-scale circulation patterns and on the definition of metrics for the analysis of long-term time-series of measured and model data. She has been responsible for the management of the CNR research infrastructure Acqua Alta Oceanographic Tower (AAOT), located in the North Adriatic Sea, including the thorough renovation program

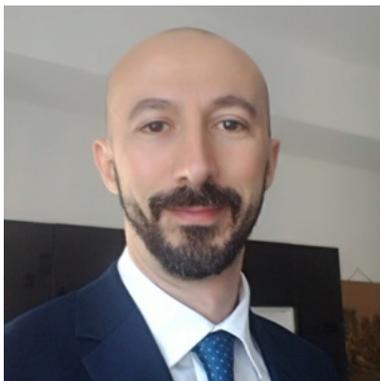
performed in 2017-2018. She has coordinated several dissemination activities, also in the field of art and science, with a particular interest on accessibility. In this field, she is also co-chairing the EuroGOOS Ocean Literacy Working Group, in which she also participates as representative of the National Research Council of Italy, to upscale the national efforts in Europe and contribute to broader Ocean Literacy efforts globally. She is currently participating in a doctoral program in DataScience at Sapienza University of Rome and she is the Principal Investigator of the PRIN 2022 project “SEAmPhonia - An innovative enlightening approach to enable the modelling of marine ecosystems by the acoustic 3D field”, a strongly interdisciplinary project that combines knowledge from the fields of solar physics, optics and oceanography for the development of an innovative approach for the study of marine ecosystems through the analysis of the three-dimensional acoustic field of the underwater soundscape.





Andrea Ravignani is a Professor of Psychology at the Department of Human Neurosciences at Sapienza University of Rome, Italy. He is also Honorary Professor of Neuroscience & Music at Aarhus University, Denmark. He received his MSc in Mathematics/Economics from the Universities of Paris 1 Pantheon-Sorbonne/UAB Barcelona/Ca' Foscari in 2010. He received his PhD in Biology from the University of Vienna, Austria in 2014. Following his doctoral work, he has been affiliated with several research institutions across Europe including the AI Lab at Vrije Universiteit Brussel, the Marine Science Center Rostock, and the Max Planck Institute for Psycholinguistics. Andrea performs research on the

cognitive, biological, and evolutionary connections between human music, speech, and animal communication. To understand why humans and other species have musical and linguistic capacities, he takes a multidisciplinary approach. He combines non-invasive animal research with human experiments, neurobiological evidence, quantitative modelling of evolutionary dynamics, and agent-based simulations. Currently, he is studying the evolution of rhythm and vocal learning, funded by an ERC Starting Grant, an HFSP Grant, and a Sapienza PI grant.

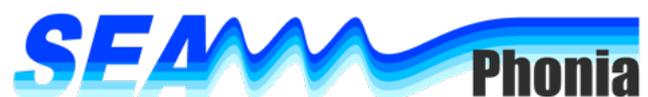
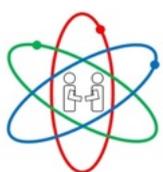


Marco Alba is a Senior Developer. He has more than 15 years of collaborating across multiple teams and development groups for the management of webGIS portals, GIS services and GIS applications. He has a strong experience in GIS software service design and development. He is expert in recent data server technologies and data interoperability standards (OpenDAP, THREDDS, ERDDAP, etc). He is the EMODnet Physics technical coordinator and serves the EMODnet TWG.



Patrick Roose is Director of the Operational Directorate Natural Environments of the Royal Belgian Institute of Natural Sciences (RBINS) since 2013. The directorate has a staff of 135 collaborators, mostly scientists, spread over 2 locations, one in Brussels and one in Ostend. They have a large and diverse expertise and a strong reputation in their fields that include ecology, molecular biology, nature conservation and protection, biodiversity, chemistry, hydrodynamics, modelling, remote sensing, data management and, data- and image processing. This expertise is applied to marine, freshwater, polar and terrestrial environments worldwide. As its director, Patrick Roose is responsible for

the general management of OD Nature that has 3 key roles being: policy support in the field of biodiversity in general and marine management in particular, providing scientific services among which management of the RV Belgica on behalf of BELSPO and, fundamental and applied scientific research. The directorate is responsible for the practical and scientific follow-up of our national monitoring obligations (MSFD, OSPAR, WFD, ...) this in close collaboration with the cabinet of the Secretary of State



for the North Sea, DG environment and scientific institutes such as ILVO, INBO and the universities. Patrick has a PhD in environmental analytical chemistry from the Free University of Amsterdam and more than 29 years of experience in the fields of marine chemistry, -monitoring and -management. Recently, he was the co-convenor for the OSPAR 2023 Quality Status report of the North-East Atlantic, a very comprehensive and innovative status assessment of that area.



Alessandro Rossi is an innovation intelligence analyst in the digital field, with background and training in finance. He has been working for about twenty years as a freelancer for investment companies and gov and no-gov agencies in the preparation of scenarios, short- and medium-term, for the market and social character. Since 2014, he has been taking part in some training projects for the development of the knowledge of corporate Intelligence by papers, blog posts, keeping university lectures and seminars in Italy. His spheres of competence are the structuring of the strategy of corporate intelligence and the impact of innovation on socio-economic contexts, finance, social communication and on the

Intelligence analyst's work. Since 2015, he has been a member of the executive committee of CESINTES, Center for Studies in Economic Intelligence and Security, at the University of Rome Tor Vergata where he teaches the Master of Economic Intelligence program. He was also responsible of the S4SID courses in cybersecurity and intelligence.

