

PERSONAL INFORMATION

Simone Libralato



HOME: [REDACTED]
 WORK: Istituto Nazionale di Oceanografia e di Geofisica Sperimentale – OGS
 Division of Oceanography: Via Beirut 2/4 (Ex-Sissa bulding), 34151, Trieste, Italy

[REDACTED]

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Skype: slibralato

Sex: [REDACTED] Date of birth: [REDACTED] Nationality: [REDACTED]

Married with two children

BIOSKETCH

Holds a senior research position at OGS - Istituto Nazionale di Oceanografia e Geofisica Sperimentale, in Trieste, Italy. He gained the habilitation for professorship (“professore seconda fascia”) in 2012, sector 05/C1 Ecology. He has a background in ecological modelling and quantitative analyses with special emphasis on bioenergetics of fish and shellfish, ecosystem modelling applied in marine environment for analysing aquaculture and fisheries issues. He has more than 15 years of research experience in marine food web modelling and application of integrated approaches to marine ecology. Experience in deterministic mathematical modelling applied to biology and ecology, such as individual based models, trophic web models and ecotoxicological models. His research is focused on combined effects of different pressures, in particular fishing, aquaculture, climate and nutrient input on marine and coastal ecosystems. His expertise has served within regional, national and international research projects. This includes coordination of field activities of the regional project for sustainable mussel aquaculture (SOSTEMITS, 2008-2010), coordination of task on Communities and food webs modeling within the RITMARE Italian flagship project (2012-2018), integration of food web and biogeochemical models for climatic and fishing scenarios in EU FP7 projects PERSEUS (2012-2015) and OPEC (2012-2014). Involved in the projects EU DG Mare RECFISH (2018-2019) for collection and analysis of historical fisheries data, MANTIS (2017-2019) on connectivity useful to manage fisheries, NOCI di MARE (2018-2019) for the simulation of ecosystem effects of the invasive species *Mnemiopsis leydi* in the Northern Adriatic. PI of the Interreg project PRIZEFISH (2019-2021) on ecolabelling of fisheries products and STRATMA (2020-2023 services to ISPRA) on MSFD indicators for Descriptor 4, in EU project NECCTON (2023-2026) contributes to DEEPBLUE (capacity building in Blue Growth 2019-2020) and VENEZIA2021 (modelling food web of the Venice lagoon; 2018-2021). He coordinates a WP in the EU project ATLANTECO (H2020, BG10; 2020-2024), TECHERA (Interreg IT-HR, 2022-2023) and BEYOND (Interreg on Offshore wind farms, 2024-2026). He was the coordinator of the project FAIRSEA (Fisheries in the Adriatic Sea – a Shared Ecosystem Approach) (2019-2021) Interreg Italy-Croatia on ecosystem approach to fisheries in the Adriatic sea. He is involved in the projects NBCF (National Center for Future Biodiversity), RETURN and INEST of the National Recovery Fund. He is elected member of the Scientific Council of OGS since 2019, member of Scientific Council of WWF Italy since 2021 and responsible for OGS headquarters in Livorno (since 2023).

Scientometric data
(march 2025)

Authored more than 100 peer-reviewed publications (149 listed in Orcid; 102 listed in Scopus) Scholar: citations 6432, H index 40; (scholar.google.it/citations?user=KccroWQAAAAJ&hl=en&oi=sra) Scopus: 4236 citations, H index 33 (Author ID: 12142364900)

WORK EXPERIENCE

From Jan 2023-ongoing
 From Jan 2020 to Dec 2022
 From Feb2010 to Dec 2019
 From Feb2008 to Feb 2010

Director of Research (Dirigente di ricerca)
Senior scientist (Primo ricercatore)
Research Scientist (Permanent position)
Research Scientist

Istituto Nazionale di Oceanografia e di Geofisica Sperimentale – OGS, Borgo Grotta Gigante, 42/c, 34010, Sgonico (Trieste), Italy

Business or sector Scientific research, marine ecology, food web modelling, fisheries ecology

From Feb2005 to Feb 2008

Post-doc

Istituto Nazionale di Oceanografia e di Geofisica Sperimentale – OGS, Borgo Grotta Gigante, 42/c, 34010, Sgonico (Trieste), Italy

From June2000 to Dec 2004

Business or sector Scientific research, marine ecology
Fellowships, contracts

Istituto Centrale per la Ricerca Scientifica e Tecnologica Applicata al Mare – ICRAM (now Istituto Superiore per la Ricerca e la Protezione Ambientale – ISPRA), Chioggia, Italy; Università Ca’ Foscari di Venezia – Dipartimento di Scienze Ambientali, Dorsoduro 3246, Venezia, Italy

EDUCATION AND TRAINING

From Sept2001 to Dec 2004

PhD

Università Ca’ Foscari – Dipartimento di Scienze Ambientali, Dorsoduro 3246, Venezia, Italy

- Title: “Marine ecosystem functioning analysed by means of indicators and models” (supervisor: Prof. Dr. Fabio Pranovi). Application of different quantitative numerical and modelling methods for an ecosystem approach to the study of anthropogenic impacts on ecosystems (fisheries in particular).

From Jul1992 to Jul1998

MSc (Cum Laude)

Università Ca’ Foscari – Dipartimento di Scienze Ambientali, Dorsoduro 3246, Venezia, Italy

- Title: Identification of a growth model for seabream (*Sparus aurata*) and its applications in aquaculture (Supervisor: Dr. R. Pastres). Development of a bioenergetic growth model, also with experimental laboratory work. Sensitivity analysis, uncertainty analysis, Montecarlo

ABROAD EXPERIENCES

12 Sept 2003 to 4 Feb 2004

Visiting scientist,

Fisheries Centre, University of British Columbia, Canada

- research collaboration with Prof. D. Pauly and Prof. V. Christensen, for developing an original index of species’ role estimated by using mass-balance models

3 March 2022 to 30 June 2002

Visiting PhD student

Fisheries Centre, University of British Columbia, Canada

- visiting PhD student for developing and analysing mass-balance models of the North Adriatic Sea and Venice Lagoon ecosystems

23 May 1997 to 6 June 1997

Visiting MSc student

Mikkeli Polytechnic, Mikkeli, Finlandia.

- Pan European Joint Project organizzato dalla NEPTUNE Association (Network for Environmental Projects in Technology, UNited in Europe)

PERSONAL SKILLS

Mother tongue(s)

Italian

Other language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C1	C1	C1	C1	C1
Replace with name of language certificate. Enter level if known.					

Levels: A1/A2: Basic user - B1/B2: Independent user - C1/C2 Proficient user
[Common European Framework of Reference for Languages](#)

Organisational / managerial skills

- Coordinator of the Action AZ3 (5 Operational Units): “Modeling communities and food web”, in the RITMARE Flagship project, SP2 –WP2 Tools for EA to Fisheries and Aquaculture (2013-ongoing);
- Coordinating logistic and field activities on mussel farm in the project SOSTEMITS (2008-2010);
- Responsible for statistical analyses of POPs intercalibration procedure (INTERCIND), 2008-2017;
- leadership (currently coordinating a team of 8 people)

Other computer skills

- good command of office suite (word processor, spread sheet, presentation software)
- more than 20 years experience on Ecopath with Ecosim ecosystem modelling software
- programming VB, R (basic skills), Fortran

Licences

Driving (B); Diving (Open water diver - PADI)

RECENT INVITED SPEAKER

- 2024 **FISHFORUM 2024**, Antalya, Turkey. S. Libralato, “Integrated fisheries management: running before we can walk?”. FAO-GFCM international Forum on Fisheries Science in the Mediterranean and Black Sea, 19-23 February 2024, Antalya, Turkey. (Keynote speaker)
- 2023 Libralato S., 2023. “Will the ocean feed humanity? Sustainability approaches to fisheries”. Workshop: **Science and Sustainable food: How Scientific Instruments Can Help Food and Biodiversity Issues for the Planet and its Inhabitant's Health**. ICTP, OGS, The Laboratory of Quantitative Sustainability, 22-23 February 2023, Trieste (invited speaker)
- 2022 Libralato S., 2022. Toward Oceans' twin: modelling approaches from physics to fish and fisheries. **Italy-South Africa bilateral workshop on “Green solutions and marine biodiversity for a sustainable blue growth”** – Gqeberha (South Africa): 1-2 December 2022.
- 2022 Libralato S., 2022. Modelling biological invasions and changes in species distribution under climate change with implications for fisheries. **Scientific Meeting “Invasion Biologique Marine et Peche”**. Project BlueAdapt, October 20-21, 2022, Sfax, Tunisia.
- 2022 Libralato S., 2022. Trend di mercato e innovazioni tecnologiche nei settori della pesca e acquacoltura (“Market trends and technological innovations in the fisheries and aquaculture sectors”). **Think in Blue Course – Blue Coasts agreements 2030**. Venice, 20 July 2022.
- 2020 Libralato S., 2020. Ecological and economic effects of EU CFP discard landing obligation evaluated using a quantitative ecosystem approach for the Northern Adriatic Sea. **MEDAC – Mediterranean Advisory Council, WG1 meeting** 18 February 2020, Roma, Italy (Invited expert)
- 2018 Libralato S., 2018. Fisheries discards: to land or not to land, that is the question. **European Marine Board - Autumn Plenary Meeting**, 24 October 2018, Trieste, Italy (Invited Plenary Evening Lecture)
- 2018 Libralato S., Fortibuoni T., Solidoro C., 2018. Food web of plastics: moving towards inclusion of plastics in ecosystem modelling. **Modelling Ocean Plastics Litter in a Changing Climate: Challenges and Mitigations** (EUROMARINE, Foresight Workshop - Horizon scanning), 26th - 27th April 2018, Oporto, Portugal (keynote speaker)
- 2017 Libralato S. 2017. Ecosystem-based approaches for supporting sustainable marine resource exploitation and spatial planning. **Bilateral symposium Italy-Korea** .Current scientific issues and innovative approaches and technologies for a sustainable fisheries development 29-30 November 2017, Busan, Korea (invited speaker)

RECENT PROJECT RESPONSABILITY

- 2022-2026 **BEYOND** (Blue Economy sYnergies fOr sustainNable DevelopmentR, Interreg Italy-Croatia), SL coordinates the WP1 on project management and environmental analyses (350 K euros)
- 2022-2026 **RETURN** (multi-Risk sciEnce for resilienT commUnities undeR a changiNg climate, Project of the National Recovy Fund. SL contribute to Spoke 4 – VS4 on Environmental degradation (75K euro)
- 2022-2026 **NBFC (National Centre for Future Biodiversity)** Contribution as PI to the Activity 1.1 Recognizing the value of biodiversity and ecosystem health toward a more sustainable fishery (value approx.. 100 K euro)
- 2022-2026 **NECTON** (New Copernicus Capability for Trophic Ocean Networks) EU funded project. PI for OGS in WP7 with a budget of approximately 100K Euros
- 2020-2023 **STRATMA (Agreement with ISPRA for the Marine Strategy Framework Directive)** S Libralato & D. Agnetta PI on Descriptor 4 – Food webs (years 2019-20: 60 Keuros; 2021-2023: 205 Keuros)
- 2020-2024 **ATLANTECO (Atlantic ECOSystems assessment, forecasting & sustainability), H2020-BG-2018-2020 project** , S Libralato is WP3 co-leader (with S. Villasante) on “Marine ecosystem health and services” (total budget >10mil Euros; OGS share: 300K euros)
- 2019-2021 **FAIRSEA** (Fisheries in the Adriatic Region - a Shared Ecosystem Approach), SL is the Project Coordinator, Interreg Italia-Croazia, CUP F26C1800039005 (2 000 000 euros)
- 2019-2021 **PRIZEFISH** (Piloting of eco-innovative fishery supply-chains to market added-value Adriatic fish products), Interreg Italia-Croazia, Principal Investigator (250 K euro)

RECENT Peer review
international Publications

1. Agnetta, D., Badalamenti, F., Sweeting, C.J., D'Anna, G., **Libralato, S.** and Pipitone, C., 2024. Erosion of fish trophic position: an indirect effect of fishing on food webs elucidated by stable isotopes. *Philosophical Transactions B*, 379(1909), p.20230167. <https://doi.org/10.1098/rstb.2023.0167>
2. Vanalderweireldt, L., Albouy, C., Le Loc'h, F., **Libralato, S.**, Millot, R., Garcia, J., Santoni, M.C., Culioli, J.M., de Bettignies, T. and Durieux, É.D., 2024. Bonifacio strait natural reserve (BSNR): Investigating ecosystem functioning through comparative modelling of marine protected areas. *Ocean & Coastal Management*, 256, p.107263. <https://doi.org/10.1016/j.ocecoaman.2024.107263>
3. Panzeri, D., Reale, M., Cossarini, G., Salon, S., Carlucci, R., Spedicato, M.T., Zupa, W., Vrgoč, N. and **Libralato, S.**, (2024). Future distribution of demersal species in a warming Mediterranean sub-basin. *Frontiers in Marine Science*, 11, p.1308325.
4. Brito, J., Libralato, S. and Morato, T. (2024). A simulation-based approach to assess the stability of marine food-webs and inform Good Environmental Status. *Ecological Indicators*, 158, p.111411.
5. Panzeri, D., Russo, T., Ameri, E., Carlucci, R., Cossarini, G., Isajlović, I., Krstulović Šifner, S., Manfredi, C., Masnadi, F., Reale, M., Scarcella, G., Solidoro, C., Spedicato, M. T., Vrgoč, N., Zupa, W., & **Libralato, S.** (2023). Identifying priority areas for spatial management of mixed fisheries using ensemble of multi-species distribution models. *Fish and Fisheries*, 00, 1–18. <https://doi.org/10.1111/faf.12802>
6. Loschi, M., D'Alelio, D., Camatti, E., Bernardi Aubry, F., Beran, A., Libralato, S., (2023). Planktonic ecological networks support quantification of changes in ecosystem health and functioning. *Scientific Report*, 13, 16683. <https://doi.org/10.1038/s41598-023-43738-y>
7. Ciliberti, S. A., Alvarez Fanjul, E., Pearlman, J., Wilmer-Becker, K., Bahurel, P., Arduin, F., Arnaud, A., Bell, M., Berthou, S., Bertino, L., Capet, A., Chassignet, E., Ciavatta, S., Cirano, M., Clementi, E., Cossarini, G., Coro, G., Corney, S., Davidson, F., Drevillon, M., Drillet, Y., Dussurget, R., El Serafy, G., Fennel, K., Garcia Sotillo, M., Heimbach, P., Hernandez, F., Hogan, P., Hoteit, I., Joseph, S., Josey, S., Le Traon, P.-Y., Libralato, S., Mancini, M., Matte, P., Melet, A., Miyazawa, Y., Moore, A. M., Novellino, A., Porter, A., Regan, H., Romero, L., Schiller, A., Siddorn, J., Staneva, J., Thomas-Courcoux, C., Tonani, M., Garcia-Valdecasas, J. M., Veitch, J., von Schuckmann, K., Wan, L., Wilkin, J., and Zulfic, R.: Evaluation of operational ocean forecasting systems from the perspective of the users and the experts, in: 7th edition of the Copernicus Ocean State Report (OSR7), edited by: von Schuckmann, K., Moreira, L., Le Traon, P.-Y., Grégoire, M., Marcos, M., Staneva, J., Brasseur, P., Garric, G., Lionello, P., Karstensen, J., and Neukermans, G., Copernicus Publications, State Planet, 1-osr7, 2, <https://doi.org/10.5194/sp-1-osr7-2-2023>, 2023.
8. Scarcella, G., Libralato, S., Dowling, N.A., Flemming, J.M., Wolff, M. (2023) Editorial: Data-limited research in stock assessment to increase the understanding of fisheries resources and inform and improve management efforts. *Frontiers in Marine Science*, 10: 1193307. DOI: 10.3389/fmars.2023.1193307
9. Riccioni, G., Stagoni, M., Manfredi, C., Tinti, F., Piccinetti, C., Libralato, S. (2022) DNA metabarcoding suggests dietary niche partitioning in the Adriatic European hake. *Scientific Reports*, 12: 1343. DOI: 10.1038/s41598-022-05346-0
10. Russo, T., Villasante, S. and Libralato, S. eds., 2023. Fishing in the time of COVID-19: Effects on fishing activities, resources, and marine ecosystems (Vol. 16648714). *Frontiers Media SA*.
11. Agnetta, D., Badalamenti, F., Colloca, F., Cossarini, G., Fiorentino, F., Garofalo, G., Patti, B., Pipitone, C., Russo, T., Solidoro, C. and Libralato, S., 2022. Interactive effects of fishing effort reduction and climate change in a central Mediterranean fishing area: Insights from bio-economic indices derived from a dynamic food-web model. *Frontiers in Marine Science*, p.1503.
12. Molony, B.W., Ford, A.T., Sequeira, A.M., Borja, A., Zivian, A.M., Robinson, C., Lønborg, C., Escobar-Briones, E.G., Di Lorenzo, E., Andersen, J.H. and Müller, M.N., 2022. Sustainable Development Goal 14-Life Below Water: Towards a Sustainable Ocean. *Frontiers in Marine Science*, 8, p.2130.
13. Vesal, S.E., Auriemma, R., Libralato, S., Nasi, F. and Del Negro, P., 2022. Impacts of organic enrichment on macrobenthic production, productivity, and transfer efficiency: What can we learn from a gradient of sewage effluents?. *Marine Pollution Bulletin*, 182, p.113972.
14. Tsagarakis K, Libralato S, Giannoulaki M, Touloumis K, Somarakis S, Machias A, Frangoulis C, Papantoniou G, Kavadas S and Stoumboudi MT (2022) Drivers of the North Aegean Sea Ecosystem (Eastern Mediterranean) Through Time: Insights From Multidecadal Retrospective

- Analysis and Future Simulations. *Front. Mar. Sci.* 9:919793. doi: 10.3389/fmars.2022.919793
15. Ricci P, Carlucci R, Capezzuto F, Carluccio A, Cipriano G, D'Onghia G, Maiorano P, Sion L, Tursi A and Libralato S (2022) Contribution of Intermediate and High Trophic Level Species to Benthic-Pelagic Coupling: Insights From Modelling Analysis. *Front. Mar. Sci.* 9:887464. doi: 10.3389/fmars.2022.887464
 16. Russo T., Catucci E., Franceschini S., Labanchi L., Libralato S., Sabatella E.C., Sabatella R.F., Parisi A. and Fiorentino F. (2022) Defend as You Can, React Quickly: The Effects of the COVID-19 Shock on a Large Fishery of the Mediterranean Sea. *Front. Mar. Sci.* 9:824857. doi: 10.3389/fmars.2022.824857
 17. Riccioni G., Stagioni M., Manfredi C., Tinti F., Piccinetti C., Libralato S., (2022). DNA metabarcoding suggests dietary niche partitioning in the Adriatic European hake. *Sci Rep* 12, 1343. <https://doi.org/10.1038/s41598-022-05346-0>.
 18. Molony BW, Ford AT, Sequeira AMM, Borja A, Zivian AM, Robinson C, Lønborg C, Escobar-Briones EG, Di Lorenzo E, Andersen JH, Müller MN, Devlin MJ, Failler P, Villasante S, Libralato S and Fortibuoni T (2022) Editorial: Sustainable Development Goal 14 - Life Below Water: Towards a Sustainable Ocean. *Front. Mar. Sci.* 8:829610. doi: 10.3389/fmars.2021.829610
 19. Link, J. S., Pranovi, F., & Libralato, S. (2022). Simulations and interpretations of cumulative trophic theory. *Ecological Modelling*, 463, 109800. <https://doi.org/10.1016/j.ecolmodel.2021.109800>
 20. Panzeri, D., Libralato, S., Carlucci, R., Cipriano, G., Bitetto, I., Spedicato, M. T., ... & Solidoro, C. (2021, October). Defining a procedure for integrating multiple oceanographic variables in ensemble models of marine species distribution. In *2021 International Workshop on Metrology for the Sea; Learning to Measure Sea Health Parameters (MetroSea) IEEE*. 2021, pp. 360-365, doi: 10.1109/MetroSea52177.2021.9611559.
 21. Anelli Monti M., Brigolin D., Franzoi P., Libralato S., Pastres R., Solidoro C., Pranovi C., 2021. Ecosystem functioning and ecological status in the Venice lagoon, which relationships? *Ecological Indicators* 133 (2021) 108461. <https://doi.org/10.1016/j.ecolind.2021.108461>
 22. Mauri E., Menna M., Garić R., Batistić M., Libralato S., Notarstefano G., Martellucci R., Gerin R., Pirro A., Hure M. and Poulain P-M.(2021) Recent changes of the salinity distribution and zooplankton community in the South Adriatic Pit. In: *Copernicus Marine Service Ocean State Report, Issue 5, Journal of Operational Oceanography*, 14:sup1, s102–s107; DOI: 10.1080/1755876X.2021.1946240
 23. Panzeri D., Bitetto I., Carlucci R., Cipriano G., Cossarini G., D'Andrea L., Masnadi F., Querin S., Reale M., Russo T., Scarcella G., Spedicato M.T., Teruzzi A., Vrgoč N., Zupa W. and Libralato S. (2021).Developing spatial distribution models for demersal species by the integration of trawl surveys data and relevant ocean variables. In: *Copernicus Marine Service Ocean State Report, Issue 5, Journal of Operational Oceanography*, 14:sup1, s114–s123; DOI: 10.1080/1755876X.2021.1946240
 24. Endrédi A, Patonai K, Podani J, Libralato S and Jordán F (2021) Who Is Where in Marine Food Webs? A Trait-Based Analysis of Network Positions. *Front. Mar. Sci.* 8:636042. doi: 10.3389/fmars.2021.636042
 25. Penca, J., Said, A., Cavallé, M., Pita C., Libralato S., 2021. Sustainable small-scale fisheries markets in the Mediterranean: weaknesses and opportunities. *Maritime Studies* (2021). <https://doi.org/10.1007/s40152-021-00222-5>
 26. Piroddi C, Akoglu E, Andonegi E, Bentley JW, Celic I, Coll M, Dimarchopoulou D, Friedland R, De Mutsert K, Girardin R, Garcia-Goriz E, Grizzetti B, Hernvann P-Y, Heymans JJ, Karulis B, Libralato S, Lynam CP, Macias D, Miladinova S, Moullec F, Palialexis A, Pam O, Serpetti N, Solidoro C, Steenbeek J, Stips A, Tomczak MT, Travers-Trolet M and Tsikliras A (2021) Effects of Nutrient Management Scenarios on Marine Food Webs: A Pan-European Assessment in Support of the Marine Strategy Framework Directive. *Front. Mar. Sci.* 8:596797. doi: 10.3389/fmars.2021.596797

Trieste, May 2025

