



# Program EVOLMAR 2023

Marine Evolution  
*r-Evolutionary* routes in the sea  
14-17 November 2023



EVOLMAR 2023: EVOLMAR 2023 - MARINE EVOLUTION R-EVOLUTIONARY  
ROUTES IN THE SEA

Tuesday, November 14th

**14:00-14:15** Conference opening proceedings: greetings from organizers

CHAIRS:

*Giulia Furfaro and Silvia Ghirotto***14:15-17:30** Session 1: BIODIVERSITY

CHAIRS:

*Luca Mirimin and Paolo Sordino***14:15-14:45** Session Keynote Speaker: 114:15 *Andrea Quattrini***Rebuilding the coral tree of life: Through Ocean Exploration, Museum Specimens, and Genomic Discovery****14:45-15:45** Session Oral presentations: 15'14:45 *Camille Prioux, Romie Tignat-Perrier, Christine Ferrier-Pagès, Antonin Guilbert, Stéphanie Reynaud, Cécile Rottier, Julie Deter, Laurent Ballesta, Denis Allemand and Jeroen Van De Water***Evolutionary patterns in octocoral-microbiota associations**15:00 *Leandro Gammuto, Joachim Langeneck, Alberto Castelli and Giulio Petroni***An updated phylogeny of the family Opheliidae (Annelida) based on complete mitogenomes**15:15 *Maria Pia Miglietta***Cryptic species in time and space: an assessment of cryptic diversity within eight nominal species of Hydrozoa (Cnidaria)**15:30 *Federica Salatiello, Angelica Miglioli, Rosa Maria Vitale, Valeria Tarallo, Claudia La Vecchia, Remi Dumollard, Michael Schubert, Alberto Pallavicini, Marco Gerdol and Enrico D'Aniello***Unraveling the Evolution and Function of the Retinoic Acid Signaling in the Mollusk *Mytilus galloprovincialis*****15:45-16:00** Coffee Break**16:00-16:28** Session Oral presentations: 7'16:00 *Flavia Migliaccio, Martina Cascone, Donato Giovannelli, Matteo Selci, Angelina Cordone, Costantino Vetriani, Rebecca L. Tyne, Peter H. Barry, Bernardo Barosa, Annarita Ricciardelli, Davide Corso, Deborah Bastoni, Francesco Montemagno, Feliciano Oliva, Gabriella Gallo, Luca Toniatti, Alessia Bastianoni, Monica Correggia, Luciano Di Iorio, Karen G. Lloyd, Gerhard L. Jessen, Agostina Chiodi, Maarten J. de Moor, Carlos J. Ramirez and Matt Schrenk***Environmental diversity, distribution and evolution of microbial metal ion transport systems**

16:07 Riccardo Virgili, Xavier Turon, Angelo Fontana and Fabio Crocetta

**New insights into the systematics of the family Pyuridae (Ascidiacea: Stolidobranchia): integrative taxonomy and molecular phylogeny of the Mediterranean species**

16:14 Anita Ferri, Roberto Simonini and Pedro M. Costa

**Relating anatomical structure and behaviour in the borrowing, clam-predator polychaete *Halla parthenopeia***

16:21 Diego Carli, Federico Plazzi, Enrico Negrisolò and Marco Passamonti

**Bivalves' mitogenomics reloaded: a new backbone for mitochondrial protein annotation in the class Bivalvia**

**16:30-16:45** Session Poster presentation: 3'

16:30 Federico La Torre, Virginia Vanni, Davide Asnicar, Federico Caicci, Emanuela De Lisa, Giacomo Sabbadin and Lucia Manni

**Transient stem cell niche dynamics of the budding tunicate *Botryllus schlosseri***

16:33 Andrea Toso, Federica Casaluçe, Michele Solca and Giulia Furfaro

**Fluorescence as a powerful tool to investigate diet and symbiosis in marine Heterobranchia (Mollusca, Gastropoda)**

16:36 Eleonora Montuori and Chiara Lauritano

**Microalgal possible applications for human pathologies**

16:39 Andrea Toso, Martina Stifani, Michele Solca, Egidio Trainito and Giulia Furfaro

**Who likes ports? Biodiversity of sea slugs (Gastropoda, Heterobranchia) within ports and marinas along the Salento peninsula (Apulia, Italy)**

**16:45-17:20** Session Oral presentations: 7'

16:45 Martina La Torre, Alex Cussigh, Alessia Cariani, Federica Costantini, Alice Ferrari, Silvia Franzellitti, Alberto Pallavicini, Federica Piattoni, David Stankovic and Sergio Stefanni

**Molecular biodiversity assessment of nekton in the Tyrrhenian deep sea**

16:52 Giulia Furfaro, Paolo Mariottini, Egidio Trainito, Giovanni Chimienti, Jeroen A.J.M. van de Water, Laurent Ballesta and Julie Deter

**A blue *Tritonia callogorgiae* Chimienti, Furfaro & Taviani, 2020 morphotype (Mollusca, Nudibranchia) reveals unexpected variability in body colour pattern and diet and a complex evolutionary history**

16:59 Matteo Putignano, Joachim Langeneck, Andrea Toso and Adriana Giangrande

**From 2 to 12 or more: how many Myxicola species are out there?**

17:06 Alice Tagliabue, Giulia Furfaro and Stefano Piraino

**Environmental DNA metabarcoding as a tool for coastal monitoring: a case study in the Southern Adriatic Apulian coastal zone**

17:13 Maria Vittoria Modica, Serena Leone, Marco Gerdol and Sebastien Dutertre

**A first look at soft corals' toxins: diversity and evolution of venom in the white seafan *Eunicella singularis***

**17:20-17:30** Session Q&A: 7' Oral presentation and 3' Poster presentations

CHAIR:

*Giulia Fassio*

**17:30-17:45** Coffee Break

**17:45-19:15** Session 2: POPULATION AND SPECIES I

CHAIRS:

*Francesca Leasi* and *Emanuela Dattolo*

17:45 David Vendrami, Joseph Hoffman and Craig Wilding

**Genomic reconstruction of the divergence dynamics of two scallop species**

18:00 Joachim Langeneck, Debora Loprete, Alejandro Martinez, Luigi Musco, Matteo Putignano, Andrea Toso, Sara Verni, Maria Cristina Gambi and Alberto Castelli

**Simple, yet so complicated: integrative taxonomy reveals *Polyopthalmus pictus* (Annelida: Opheliidae) as a species complex in European waters**

18:15 Francesco Montemagno, Chiara Romano, Angelina Cordone, Olga De Castro, Sergio Stefanni, Emilio Sperone and Donato Giovannelli

**Shark microbiome analysis demonstrates unique microbial communities in two distinct Mediterranean Sea shark species**

18:30 Chiara Gregorin, Tomás Vega Fernández, Luigi Musco and Stefania Puce

**Collective predation of large prey by small-sized cnidarian polyps: individual behavior, population effects, underlying processes**

**18:45-18:59** Session Oral presentation 7'

18:45 Marco Sollitto, Rui Faria and Marco Gerdol

**Pangenomic architectures are more widespread than originally thought in marine invertebrates: first evidence of gene presence/absence variation in the periwinkle *Littorina fabalis***

18:52 Bruna Oršanić, *Andrea Toso, Michele Solca, Paolo Mariottini, Chiara Papetti and Giulia Furfaro*  
**A fiery nudibranch: the amazing connection between *Spurilla neapolitana* (Delle Chiaje, 1841) (Mollusca, Heterobranchia) and its symbiotic unicellular algae**

**19:00-19:15** Session Q&A: 7' Oral presentation

CHAIR:

*Daniela Pica*

Wednesday, November 15th

**14:00-17:10** Session 3: ADAPTATION

CHAIRS:

*Luigi Musco and Marco Passamonti***14:00-14:30** Session Keynote Speaker: 314:00 *Jeanne Serb***The interplay of adaptation and exaptation in the eyes of pteriomorphian bivalves****14:30-15:30** Session Oral presentations: 1514:30 *Livia Pinzoni, Lisa Locatello, Clelia Gasparini and Maria Berica Rasotto***Female reproductive fluid and male seminal fluid: the non-gametic conflict for post-mating control**14:45 *Elisa Carotti, Federica Carducci, Marco Barucca, Adriana Canapa and Maria Assunta Biscotti***The balance between transposable elements and their silencing mechanisms: environmental adaptation of ray-finned fish**15:00 *Manh Hung Nguyen, Miriam Ruocco, Emanuela Dattolo, Paola Federica Cassetti, Sebastiano Calvo, Agostino Tomasello, Lázaro Marín-Guirao, Mathieu Pernice and Gabriele Procaccini***Signs of local adaptation by genetic selection and isolation promoted by extreme temperature and salinity in the Mediterranean seagrass *Posidonia oceanica***15:15 *Federico Plazzi, Diego Carli, Alessandro Formaggioni, Iuri Icaro and Marco Passamonti***SmithRNAs: a new arena for mito-nuclear interaction and coevolution****15:30-15:45** Coffee Break**15:45-16:20** Session Oral presentations: 7'15:45 *Ilaria D'Aniello, Maria Nardiello, Simonetta Frascchetti, Katuscia Petrosillo, Folco Giomi, Antonino Miccio, Maria Gabriella Marin and Marco Munari***Physiological and behavioral responses of the sea urchin *Arbacia lixula* from volcanic CO<sub>2</sub> vents**15:52 *Sarah Farhat, Maria Vittoria Modica and Nicolas Puillandre***Whole genome duplication and gene evolution in the hyperdiverse venomous gastropods**15:59 *Jessica Pazzaglia, Luca Ambrosino, Samuele Greco, Koen Verhoeven, Gabriele Procaccini and Lázaro Marín-Guirao***Exploring stress memory in seagrasses**



16:06 Rosa Donadio, Maria Luisa Pica, Ermenegilda Vitale, Giulia Costanzo, Alberto Colletti, Erika Fabbrizzi, Simonetta Frascchetti and Carmen Arena

**Assessing the resilience of the coralline macroalgae *Ellisolandia elongata* to high irradiances and desiccation in natural habitat**

16:13 Marta Mammone, Victoria Sharp, Michael Hewitt and Mónica Medina

**The influence of photosymbiosis in *Cassiopea xamachana* regenerative success**

**16:20-16:30** Session Poster presentation: 3'

16:20 Chiara Stefanelli, Alberto Biscontin, Gabriele Sales, Bettina Meyer, Cristiano Bertolucci and Cristiano De Pittà

**Identification and characterization of vrille and pdp1 circadian genes in the Antarctic krill**

16:23 Oliviero Borgheresi, Michael Tangherlini, Livia Pinzoni and Lisa Locatello

**Interaction between thermal ecology, mating population density and sexual selection in a wild fish**

16:26 Eleonora Montuori and Chiara Lauritano

**Transcriptome sequencing of the diatom *Asterionellopsis thurstonii* and in silico identification of enzymes potentially involved in the synthesis of bioactive molecules**

**16:30-17:00** Session Oral presentations: 7'

16:30 Antonia Bruno, Anna Sandionigi and Lisa Locatello

**Impact of the ejaculate microbiome on the outcome of sperm competition**

16:37 Andrea Gaion, Guido Scatena, Cristina Vrinceanu and Davide Sartori

**Biological adaptations to Climate Change (CC) and Ocean Acidification (OA) convey the need for consideration in regulatory protocols: evidence from 20 years of biological tests with *Paracentrotus lividus***

16:44 Alessia Riccardi, Emanuela Dattolo, Marco Miralto, Gabriele Procaccini, Maria Luisa Chiusano and Luca Ambrosino

**Comparative transcriptomics between *P. oceanica* and *C. nodosa* populations reveals insights on environmental adaptation mechanisms in seagrasses**

16:51 Gabriele Andreatta, Birgit Poehn, Federico Scaramuzza, Alexander Stockinger, Aida Coric, Lukas Orel, Florian Raible and Kristin Tessmar-Raible

**Time to leave Neverland: Decoding the timing mechanisms of maturation and reproduction in the Sea**

**17:00-17:10** Session Q&A: 7' Oral presentation and 3' Poster presentations

CHAIR:

*Marco Munari*

**17:10-17:25** Coffee Break

**17:25-19:05** Session 2: POPULATION AND SPECIES II

CHAIRS:

*Francesca Leasi and Emanuela Dattolo*

**17:25-17:55** Session Keynote Speaker: 2

17:25 *Thorsten Reusch*

**The Pace of Clonal Evolution in Seagrasses**

**17:55-18:37** Session Oral presentations: 7'

17:55 *Valentina Crobe, Alice Ferrari, Fausto Tinti and Alessia Cariani*

**The cradle of diversity: Central Atlantic Ocean hides a mosaic of skate species (*Rajiformes*)**

18:02 *Andrea Toso, Marcella D'Elia, Michele Solca, Egidio Trainito, Paolo Mariottini and Giulia Furfaro*

**Unveiling cryptic diversity in a pelagic sea slug (*Gastropoda*, *Heterobranchia*)**

18:09 *Erika Arcadi, Carmen Rizzo, Pietro Battaglia, Maria Giulia Stipa, Rosario Calogero, Pierpaolo Consoli, Luca Pagano, Valentina Scutteri, Franco Andaloro and Teresa Romeo*

**Microbial assemblage associated to demersal fish species inhabiting the shallow hydrothermal sites of Vulcano Island, Mediterranean Sea**

18:16 *Salma Bahij, Hounaida Farah Idrissi and Abdelilah Fahde*

**Feeding habits of *Octopus vulgaris* caught off the western Mediterranean, Northern Morocco, with a review of its diet**

18:23 *Davide Asnicar, Marco Munari and Maria Gabriella Marin*

**Intra- and transgenerational plasticity and acclimation capability in sea urchins (*Paracentrotus lividus*) under long-term exposure to seawater acidification**

18:30 *Jacopo Martelossi, Valentina Peona, Andrea Luchetti, Alexander Suh and Fabrizio Ghiselli*

**High within- and between-individual structural variability is related to transposable element insertions and deletions in oysters**

**18:40-18:52** Session Poster presentation: 3'

18:40 *Yann Toso, Andrea Toso, Lara Marastella Fumarola, Marcella D'Elia, Michel Bariche, Stefano Piraino and Giulia Furfaro*

**I came along with you: first Mediterranean record of a Red Sea nudibranch, *Lomanotus vermiformis* Eliot, 1908, three decades after its favourite hydrozoan prey, *Macrorhynchia philippina***



18:43 Maria Luisa Pica, Rosa Donadio, Ermenegilda Vitale, Giulia Costanzo, Marco Munari and Carmen Arena

**Structural and functional ecological traits in *Gongolaria barbata* individuals from a transitional water system**

18:46 Rossana Romano, Luigi Rosati and Palma Simoniello

**Impact of micro and nanoplastics on the gills, digestive glands, and byssus apparatus in *Mytilus galloprovincialis***

18:49 Francesca Leasi, Ester M Eckert, Jon L Norenburg, W Kelley Thomas, Joseph L Sevigny, Jeffrey A Hall, Herman H Wirshing and Diego Fontaneto

**Microbiota associated with meiofaunal nemerteans reveals evidence of phylosymbiosis**

**18:55-19:05** Session Q&A: 7' Oral presentation and 3' Poster presentations

CHAIR:

*Daniela Pica*

Thursday, November 16th

**14:00-17:15** Session 4: MACROEVOLUTION

CHAIRS:

*Mariavittoria Modica and Sergio Stefanni***14:00-14:30** Session Keynote Speaker: 414:00 *Nicolas Puillandre***The ERC HYPERDIVERSE project: untangling drivers of hyperdiversification in neogastropods.****14:30-15:30** Session Oral presentations: 15'14:30 *Gabriele Sansalone and Carmelo Fruciano***Fluid relationship between rates of speciation and rates of phenotypic evolution in a hyperdiverse fish clade**14:45 *Tanya Alessandro and Rossella Annunziata***“The molecular basis of circadian rhythms in echinoderm larvae”**15:00 *Mariangela Iannello, Giobbe Forni, Giovanni Piccinini, Ran Xu, Jacopo Martelossi, Fabrizio Ghiselli and Liliana Milani***Signatures of extreme longevity: a perspective from bivalve molecular evolution**15:15 *Alessio Iannucci, Roberto Biello, Andrea Benazzo, Christine L. Y. Cheng, Ng Ka Hei, Giovanni Bacci, Duccio Cavalieri, Claudio Ciofi, Alessio Mengoni, Niccolò Meriggi, Stefano Cannicci and Sara Fratini***Genomic traits of the water-to-land transition in brachyurans: the terrestrial crab *Chiromantes haematocheir* as a model species****15:30-15:45** Coffee Break**15:45-16:20** Session Oral presentations: 7'15:45 *Giulia Fassio, Giacomo Chiappa, Elisa Nocella, Thomas Lemarcis, Tsuyoshi Takano, Yasunori Kano, Nicolas Puillandre, Philippe Bouchet, Nancy Treneman, Manuel António E. Malaquias, Maria Vittoria Modica and Marco Oliverio***Shell evolution in Velutinoidea: a phylogenetic approach**15:52 *Filippo Nicolini, Fabrizio Ghiselli, Liliana Milani and Andrea Luchetti***Contrasting patterns of amino acid evolution and shared ancestry between putative sex-determining genes in bivalve molluscs**15:59 *Giuseppe Emanuele De Pasquale, Jacopo Martelossi, Filippo Nicolini, Liliana Milani and Fabrizio Ghiselli***Contrasting patterns of conservation and divergence of Hox genes in molluscs**

16:06 *Marco Gerdol, Rita Marino, Michelina Plateroti, Annamaria Locascio and Maria Sirakov*  
**Novel insights on *Ciona robusta* gut physiology and evolution**

16:13 *Alessandro Formaggioni, Gianmarco Cavalli, Mayuko Hamada, Tatsuya Sakamoto, Federico Plazzi and Marco Passamonti*

**Evolution of the small RNA pathways in animals and the loss of endo-siRNAs among Lophotrochozoa**

**16:20-16:35** Session Poster presentation: 3'

16:20 *Assunta Liberti, Carla Pollastro, Gabriella Pinto, Anna Illiano, Rita Marino, Angela Amoresano, Antonietta Spagnuolo and Paolo Sordino*

**Developing *C. robusta juveniles* as an experimental system in comparative immunology of invertebrate chordates**

16:23 *Carla Pollastro, Assunta Liberti, Antonietta Spagnuolo and Paolo Sordino*

**Exploring the *Ciona robusta* immunome**

16:26 *Emanuela De Lisa, Lorian Ballarin, Jacopo Bernardi, Giacomo Sabbadin, Federico La Torre and Lucia Manni*

**Diving into the Past: Exploring Ascidian Biodiversity through Historical and recent records**

16:29 *Sara Verni, Joachim Langeneck, Sergio Stefanni, Luigi Musco, Gabriele Cananzi and Alberto Castelli*

**DEEPOLY: Combining different molecular approaches to study deep-sea polychaetes in the Mediterranean**

**16:35-17:03** Session Oral presentations: 7'

16:35 *Elisa Nocella, Sofya Sergeevna Zvonareva, Giulia Fassio, Daniela Pica, Raimondo Villa, Maria Vittoria Modica and Marco Oliverio*

**The evolution of corallivory in the Ovulidae (Gastropoda: Cypraeoidea)**

16:42 *Annamaria Locascio, Quirino Attilio Vassalli, Immacolata Castellano and Anna Palumbo*

**From tunicates to vertebrates, evolution of Nitric oxide signaling**

16:49 *Martina Spiga, Antonio Di Natale, Alice Ferrari, Fulvio Garibaldi, Alberto Pallavicini, Sara Gioele Rizzo, Frine Eleonora Scaglione, Sergio Stefanni, Alberto Valazza and Alessia Cariani*

**Exploring the Link Between Genetic and Morpho-Anatomical Diversity in the Swordfish's Rostra**

16:56 *Morena Nava, Romain Sabroux, Sandra Álvarez-Carretero, Philip C. J. Donoghue, Gregory D. Edgecombe, Russel J. Garwood and Davide Pisani*

**A timescale to sea spiders' evolution (Arthropoda : Pycnogonida)**

**17:05-17:15** Session Q&A: 7' Oral presentation and 3' Poster presentations

CHAIR:

*Giulia Furfaro*

**17:15-17:30** Coffee Break

**17:30-18:00** Session Special Guest

CHAIR:

*Giulia Furfaro*

17:30 *Laurent Ballesta*

**Gombessa: The Mystery of the Rings**

**18:00-19:00** Session Awards: PHOTOCOMTEST EVOLMAR 2023 - VOTE BY THE AUDIENCE

CHAIRS:

*Lisa Locatello and Michele Solca*

Friday, November 17th

**14:00-17:30** Session 5: CONSERVATION

CHAIRS:

*Lucia Bongiorni and Emiliano Trucchi***14:00-14:30** Session Keynote Speaker: 514:00 *Toby S. Daly-Engel***The World According to Sharks: Lessons on surviving climate change from Earth's oldest predator****14:30-15:30** Session Oral presentations: 15'14:30 *Giacomo Chiappa, Arianna Giannini, Luigi Romani, Giulia Fassio, Dario Zuccon, Daniele De Angelis, Daniele Pagli, Yuri Kantor, Ellen Strong, Paolo G. Albano, Nicolas Puillandre, Maria Vittoria Modica, Philippe Bouchet and Marco Oliverio***Counting stars: local and global projections of gastropod diversity**14:45 *Luciano Bosso, Melisa Olave, Maeva Gabrielli, Roberto Biello, Josefin Stiller, Ralf Schneider, Andrea Benazzo, Giorgio Bertorelle and Francesca Raffini***Integrating ecological and genomic insights for monitoring conservation status and trends in seahorses**15:00 *Roberto Biello, Alessio Iannucci, Silvia Fuselli, Maria Cristina Fossi, Cristina Panti, Jorge Urbán Ramírez and Annalaura Mancía***Genomic Erosion on Fin Whales (*Balaenoptera physalus*) in the Mediterranean Sea and the Sea of Cortez Populations**15:15 *Livia Tolve, Alessio Iannucci, Luisa Garofalo, Andrea Ninni, Andrea Capobianco Dondona, Ilaria Ceciari, Cristiano Cocumelli, Alessandra De Lucia, Mattia Falconi, Angela Formia, Federico Iacovelli, Cecilia Mancusi, Erica Marchiori, Letizia Marsili, Toni Mingozi, Stefano Nannarelli, Chiara Natali, Giuliana Terracciano, Marco Alberto Luca Zuffi, Andrea Novelletto and Claudio Ciofi***Whole mitochondrial genome sequencing provides new insights into the phylogeography of loggerhead turtles (*Caretta caretta*) in the Mediterranean Sea****15:30-15:45** Coffee Break**15:45-16:20** Session Oral presentations: 7'15:45 *Carlo Pecoraro, Chiara Papetti and Carmelo Fruciano***Hidden in the ocean: the importance of detecting hybridisation in pelagic and deep-water fishes**15:52 *Silvia Giorgia Signorini, Marco Munari, Fabio Crocetta, Ilaria D'Aniello, Lara Nigro and Camilla Della Torre***Adaptive mechanisms to Ocean Acidification of different limpet species from the CO<sub>2</sub> vent systems of Ischia Island (Italy)**

15:59 Patrizia Stipcich, Gabriella La Manna and Giulia Ceccherelli

**Investigating the thermal indicators linked to flowering and fruiting of the seagrass *Posidonia oceanica* and estimating the uncertainties due to local factors**

16:06 Sofia Albrecht, Sinéad Murphy, Cyril Gallut, Jean-Luc Jung, Orla Slattery, Cóilín Minto, Emer Rogan and Luca Mirimin

**Pioneering metabarcoding of stranded cetaceans: Stomach contents unleashed!**

16:13 Raffaele Panzuto, Luciano Bosso, Rosario Balestrieri, Sonia Smeraldo, Maria Luisa Chiusano, Francesca Raffini, Luigi Musco and Claudia Gili

**Teach a man to fish and we may increase seahorses' protection: evidence from citizen science and spatial ecology in the Italian Hippocampus species**

**16:20-16:35** Session Poster presentation: 3'

16:20 Marco Fianchini, Cosimo Solidoro and Donata Canu

**Predicting the kinetic of spread for Alien Invasive Species in the Mediterranean Sea: *Caulerpa cylindracea* as a case study**

16:23 Arianna Giannini and Marco Oliverio

**Defreeze mollusc data in Italy**

16:26 Giacomo Sabbadin, Emanuela De Lisa, Federico La Torre, Loriano Ballarin, Chiara Anselmi, Giovanni Zambon, Alessandro Bisceglie, Emanuele Asnaghi and Lucia Manni

**Are Ascidians behavior and physiology affected by underwater noise pollution?**

16:29 Ermelinda del Buono, Nicola Nurra, Alessandra Griglione, Marco Battuello, Rocco Mussat Sartor, Livio Favaro, Guillem Mateu Vicens, Giovanna Berti, Maria Cesarina Abete and Stefania Squadrone

**Phytoplankton: a suitable bioindicator of the occurrence of Rare Earth Elements (REEs) and trace metals in the Mediterranean Sea**

**16:35-17:03** Session Oral presentations: 7'

16:35 Katiuscia Petrosillo, Maria Cristina Gambi, Cinzia De Vittor and Valentina Esposito

***Posidonia oceanica* adaptative responses to ocean acidification**

16:42 Lorenzo Massimo Toniolo, Davide Seveso, Jani Tanzil, Danwei Huang, Wei Long Ow Long, Jonas Khaw Chee Haw, Chenoa Bo Kannan, Lionel Ng, Wai Leong and Yohan Louis

**The Effects of Short-Term Acute Low-Light Exposure on the Coral *Pachyseris speciosa* from Singapore's Turbid Reef: a Photo-Physiological and Transcriptomic Approach**



16:49 *Gabriele De Falco, Luca Ambrosino, Chiara Lauritano, Sandro Banfi and Sabrina Carrella*

**MicroRNA-mediated environmental adaptation in microalgae: from physiological responses to the identification of novel biomarkers.**

16:56 *Federica Poli, Simone Bava, Elena Desiderà, Davide Di Blasi and Paolo Guidetti*

**Analysing life-history and ecological traits to investigate the response to protection of rocky-reef fish community in a Mediterranean Marine Protected Area**

**17:05-17:15** Session Q&A: 7' Oral presentation and 3' Poster presentations

CHAIR:

*Lisa Locatello*

**17:15-17:30** Coffee Break

**17:30-17:50** Session Awards: PHOTCONTEST EVOLMAR 2023 - THE GRAND JURY AWARDS

CHAIRS:

*Michele Solca*

**17:50-18:00** Session Awards: EVOLMAR 2023

CHAIRS:

*Mariavittoria Modica*

**18:00-18:10** Conference closing proceedings: greetings from organizers

**18:10-18:30** Ending video