Programme of the sessions
Oral presentations

Monday, August 31

Grande Auditório

Opening Session

Chairpersons: Marina R Cunha, Ricardo S Santos

9:30 Opening: Welcome, brief statements from the Secretary of State for the Sea, the Rector of Universidade de Aveiro, The Mayor of the city and the President of the Deep-Sea Biology Society

10:15 Coffee break

Plenary session

10:45 1 Gjerde KM, Gebicka A - Deep seabed mining on the near-term horizon: What will future environmental management look like?

Stewardship of our deep oceans (DOSI)

Chairpersons: Maria Baker, Lisa Levin

11:30 6 Ingole BS, Sautya S, Singh R et al - Diversity and distribution of benthic meio and macro fauna in the nodule rich Central Indian

11:45 7 Rowden AA, Leduc D, Torres LG et al - Distribution of epifaunal communities associated with phosphorite nodule deposits on Chatham Rise, Southwest Pacific: implications for management of seabed mining

12:00 8 Currie B - A step into the unknown? Namibia’s caution to mine marine phosphates

12:15 9 Smith CR, Amon DJ, Drazen J et al - Nodule mining and ocean stewardship in the CCZ: An overview of the ABYSSLINE project with results on macrofaunal diversity and community structure

12:30 Lunch break

14:00 10 Ardron JA - Deep-sea mining: not yet a done deal

14:15 11 Boschen RE, Rowden AA, Clark MR, Gardner JPA - Variation in megabenthic assemblage structure at seafloor massive sulfide deposits

14:30 12 Zhou Y, Ossorio PN - A study of the International Seabed Authority as a governance institution for deep seabed

14:45 13 Gianni MG - Managing the impacts of fishing and mining in the deep sea: political, policy and scientific challenges

15:00 14 Trueman CN - Carbon capture and storage roles of slope-depth demersal fish ecosystems: community function and policy relevance

15:15 15 Clarke J, Bailey DM, Neat FC - Drawing a line under deep-sea fishing: a scientific basis for regulation by depth

15:30 Coffee break

16:00 16 Althaus F, Williams A, Alderslade P, Schlacher TA - Conservation of marine biodiversity on deep continental margin: how representative are large offshore reserves
16:15  17 Harden-Davies H - Governing marine genetic resources beyond national jurisdiction: what role for non-monetary benefit sharing?
16:30  18 Ramirez-Llodra E, Shimmield T, Baker MC et al - Environmental impacts of disposal of terrestrial mine tailings in the deep ocean: current knowledge and gaps
16:45  19 Le JT, Carson RT, Grupe BM, Levin LA - Ecosystem services: a framework for environmental management of the deep sea

17:00  20 Juniper SK, Baker M - Biological research as a deep-sea stakeholder
17:15  21 Sink KJ, McQuaid KA - Stakeholder participation to support offshore protection: Lessons from Africa
17:30  22 Donaldson K, Larkin K, Rogers A - Investment in deep-sea research: The European landscape

Pequeno Auditório

Biodiversity and ecosystem functioning – Trophic ecology

Chairpersons: Clara Rodrigues et al

11:30  23 Durden JM, Huffard CL, Bett BJ et al - The response to food inputs - temporal variation in megabenthic deposit feeding in the abyss
11:45  24 Górska B, Włodarska-Kowalczyk M, Soltwedel T - Benthic biomass size spectra in Arctic deep-sea (Hausgarten observatory, Fram Strait)
12:00  25 Vieira RP, Chung M-T, Johnston G et al - Functional ecology of deep-sea fishes across a depth gradient elucidated by stable isotope analysis
12:15  26 Nomaki H, Chikaraishi Y, Nanako OO et al - Multiple food sources and trophic position of a bathyal benthic ecosystem as revealed by nitrogen isotopic composition of amino acids
12:30  Lunch break

Biodiversity and ecosystem functioning – Habitats and their assemblages

Chairpersons: Clara Rodrigues et al

14:00  27 Kitazato H, Fujikura K, Takai K et al - Quelle 2013 cruise: hi-light from deep-sea cruises at southern hemisphere
14:15  28 Messing CG, Reed JK, Dodge RE et al - Macrofaunal assemblages on the Miami Terrace: results of multiple ROV surveys
15:00  31 Molodtsova TN, Britaeyev TA, Martin D, Budaeva NE - Deep-sea corals and their polychaete symbionts
15:15  32 Grange LJ, Smith CR, Lindsay DJ, Youngbluth MJ - High abundance of the epibenthic trachymedusa Ptychogastria polaris Allman, 1878 (Trachylida, Hydroidea) in subpolar fjords along the West Antarctic Peninsula
15:30  Coffee break
Biodiversity and ecosystem functioning – Large-scale processes

Chairpersons: Clara Rodrigues et al

16:00 33 Paterson GLJ, Menot L, Colaço A et al - Rarity in the deep sea – just how much of a challenge is it?

16:15 34 Baldrighi E, Giovannelli D, d’Errico G, Manini E - Deep-sea ecosystem: a world of positive species interactions?

16:30 35 Woolley SNC, Tittensor DP, Guillera-Arroita G et al - Energy export drives unique global patterns of deep-sea biodiversity

16:45 36 Ichino MC, Barry JP, Bett BJ et al - Deep-sea benthic biomass: a model framework to account for surface productivity, topography and ocean currents in driving food availability for fauna at abyssal plains, hills, seamounts and trenches

17:00 37 Billett DSM, Gubili C, Kremenetskaia A et al - Deep sea connectivity in space and time (series)

17:15 38 Lampadariou N, Sevastou K, Tselepides A et al - Fertilization of the north Aegean Sea: response of benthic communities to the inflow of mesotrophic Black Sea waters

17:30 39 Ziegler AF, Smith CR - The influence of ice-rafted debris on megabenthic diversity and community structure in fjords of the west Antarctic Peninsula

Tuesday, September 1

Grande Auditório

Plenary session

8:30 2 Rogers AD, Boetius A, Brierley AS et al - European research needs to underpin the sustainable management of Blue Growth in the deep sea

Natural and anthropogenic disturbance

Chairpersons: Ann Vanreusel, Ana Colaço

9:15 40 Clark MR, Rowden AA, Bowden DA et al - Evaluating the vulnerability of benthos to anthropogenic disturbance in different deep-sea habitats

9:30 41 Currie JC, Sink KJ, Atkinson LJ et al - Trawling in South Africa: long-term change and potential impacts on benthic habitats


10:00 43 DeLeo DM, Lengyel SD, Cordes EE - Transcriptomics as a tool to investigate the responses of cold-water corals to anthropogenic stressors

10:15 Coffee break

10:45 44 Auguste M, Mestre NC, Rocha TL et al - Accumulation of metals and biomarkers response in Rimicaris exoculata from TAG (Mid-Atlantic Ridge) vent field after copper exposure

11:00 45 Cardoso C, Gomes T, Osório H et al - A membranar subproteome approach to understand the relationship
between the polychaete Branchipolynoe seepensis and the mussel Bathymodiolys azoricus from Lucky Strike hydrothermal vent field


11:30  47  Georgian SE, Dupont S, Kurman M, Cordes EE - Biogeographic variability in the physiological response of the cold-water coral Lophelia pertusa to ocean acidification

11:45  48  Chu J, Tunnicliffe V - Ecophysiological limits to aerobic metabolism structures epibenthic communities in the Northeast Pacific

12:00  49  Yasuhara M, Danovaro R - Temperature impacts on deep-sea biodiversity

12:15  50  Yamakita T, Oguri K, Yokooka H et al - Distribution and temporal dynamics of the brittle star population in the continental slope off Sanriku, Northeast Japan: before-after the earthquake and selection of important area

12:30  Lunch break

14:30  51  Fisher CF, Girard F - Update on the status of deep-water coral communities impacted by the Deepwater Horizon oil spill

14:45  52  Gates AR, Blake JA - Megabenthic abundance and diversity at oil and gas exploration sites in the western Indian Ocean

15:00  53  Witte U, Ferguson R, Gontikaki E, Anderson J - Transport and degradation of oil hydrocarbons at subzero temperatures in deep Faroe Shetland Channel sediments

15:15  54  Jones DOB, Kaiser S, Sweetman AK et al - A quantitative review of the existing experimental assessments of the biological effects of deep-water polymetallic nodule mining

15:30  55  Nakajima R, Yamamoto H, Kawagucci S et al - Post-drilling changes in seabed landscape and megabenthos in a deep-sea hydrothermal system, the Iheya North field, Okinawa Trough

15:45  Coffee break

16:15  56  Narayanaswamy BE, Cautain I, Lamont PA et al - The other “Station M”, NE Atlantic: Preliminary results investigating response of the benthic community to variations in primary productivity and hence a changing climate

16:30  57  Dunlop KM, Ruhl HA, van Oevelen D, Smith Jr KL - Modeling carbon flow at Station M: Predicting the effect of climate change on the deep-sea carbon cycle

16:45  58  Sato KN, Schiff K, Luong S et al - Response of dominant echinoids to multiple climate-change variables in the Southern California Bight

17:00  59  Jeffreys RM, Billett DSM, Wolff GA - Shifts in deep-sea food webs linked to climate and food supply

17:15  60  Netburn AN, Tresguerres M - Metabolic enzyme activities of mesopelagic fishes in the California Current Ecosystem: indicators of hypoxic stress?

17:30  61  Soto EH, Quiroga E, Ganga B - Macrobenthos response and sediment properties under hypoxia conditions at continental margin of central Chile
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<tr>
<th>Time</th>
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<th>Speaker(s)</th>
<th>Title</th>
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<tr>
<td>9:15</td>
<td>62</td>
<td>Martini S, Tamburini C</td>
<td>Effect of water masses on deep bioluminescence activity</td>
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<tr>
<td>9:30</td>
<td>63</td>
<td>Lindsay DJ, Grossmann MM, Hidaka-Umetsu M et al</td>
<td>Horizontal advection of mesopelagic communities: effects on biodiversity and niche partitioning</td>
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<td>9:45</td>
<td>64</td>
<td>Vereshchaka AL, Abyzova GA, Lunina AA, Musaeva EI</td>
<td>The deep-sea zooplankton in the Central, South, and North Atlantic</td>
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<td>10:00</td>
<td>65</td>
<td>Robison BH, Reisenbichler KR, Sherlock RE, Walz KR</td>
<td>The Wedge: Long-term effects of expanding oxygen minimum zones on mesopelagic communities</td>
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<td>9:45</td>
<td>60</td>
<td>Grossmann MM, Nishikawa J, Lindsay DJ, Mitarai S</td>
<td>Diversity and community structure of pelagic cnidarians in the Celebes and Sulu Seas</td>
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<td>12:00</td>
<td>71</td>
<td>Choy CA, Popp BN, Drazen JC et al</td>
<td>Trophic structure and food resources of North Pacific midwater communities inferred from nitrogen isotopic compositions</td>
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<td>12:15</td>
<td>72</td>
<td>Sutton TT, Boswell K, Bracken-Grissom H et al</td>
<td>Understanding deep-pelagic ecosystem variability in an age of increasing deep-ocean commercial activity: A Gulf of Mexico case study and new research initiative (DEEPEND)</td>
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<td>Lunch break</td>
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<td>14:30</td>
<td>73</td>
<td>Doya C, Aguzzi J, Furishima Y et al</td>
<td>Activity rhythms of a whale-fall ecosystem in Japanese waters</td>
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<td>14:45</td>
<td>74</td>
<td>Whelpley JM, Holland ND, Kuhnz LA et al</td>
<td>Biology of deep-sea torquaratorid acorn worms</td>
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<td>15:00</td>
<td>75</td>
<td>Huffard CL, Clary-Lemon L, Kuhnz LA et al</td>
<td>Demographic indicators of recruitment in a guild of abyssal holothurians (Sta M, 4000m)</td>
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<td>15:15</td>
<td>76</td>
<td>Hendrickx ME, Papiol V</td>
<td>Insights on the biology and ecology of the deep-water shrimp <em>Parapontophilus occidentalis</em> (Faxon, 1893) (Crustacea: Caridea: Crangonidae) in the eastern Pacific with notes on its morphology</td>
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<tr>
<td>15:30</td>
<td>77</td>
<td>Finucci B, Dunn MR</td>
<td>The reproductive biology of two deep-sea chimaeras, <em>Hariotta raleighana</em> and <em>RhinocHEMA pacifica</em></td>
</tr>
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15:45 Coffee break

16:15 78 Orejas C, Rakka M, Sampaio I et al - Reproductive biology of key habitat-forming cold-water corals in the Azores Archipelago

16:30 79 Neves BM, Edinger E - Can surface primary productivity explain colony growth rates in the deep-water gorgonians *Primnoa pacifica* and *Primnoa resedaeformis*?

16:45 80 De Clippele LH, Orejas C, Lundälv T, Roberts JM - Health status assessment of cold-water coral reefs using a morphotype approach

17:00 81 Durkin A, Cordes EE - Population dynamics of the long-lived tubeworm *Escarpia laminata* at Gulf of Mexico cold seeps

17:15 82 Chung M, Shores D, Vieira RP, Trueman CN - Life history traits in deep-sea fishes revealed by otolith microchemistry

17:30 83 Baumiller TK, Messing CG, Svyerson VJP, Stanley K - Arm regeneration and rates of arm loss in the crinoids *Endoxocrinus carolinae* and *Holopus mikihe*: insights into functional morphology, behavior, and ecology

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**Wednesday, September 2**

**Grande Auditório**

**Plenary session**

**Biodiversity and ecosystem functioning – Hadal systems**

**Chairperson:** Alan Jamieson

8:30 3 Jamieson A - Beyond the abyss: progress in hadal exploration

9:15 84 Shank TM, Drazen J, Yancey P et al - Hadal Ecosystems Studies 2014: Examining relationships of pressure, food supply, topography, and adaptive evolution in the Kermadec and Mariana Trenches

9:30 85 Brandt A, Malyutina M et al - The German-Russian deep-sea expedition KuramBio (Kurile Kamchatka Biodiversity Studies) – results and perspectives

9:45 86 Guggolz T, Brandt A - Hadal Polychaeta (Annelida) of the Puerto Rico Trench

10:00 87 Linley TD, Stewart A, McMillan P et al - The loss of scavenging fish fauna at the abyssal/hadal transition and the implications of trench systems with atypical vertical zonation

10:15 88 Nunnally CC, Drazen JC, Grammatopoulou E, Mayor DJ - Measurements of individual and community respiration rates using in situ respirometers in deep-sea trenches

10:30 Coffee break
11:00  89  Gerringer ME, Yancey PH, Davydov D, Drazen JC - Trends in metabolic enzyme activities and pressure-related changes in maximum reaction rate of lactase dehydrogenase in abyssal and hadal fishes

11:15  90  Grammatopoulou E, Thornton B, Robinson D et al - Distribution and origin(s) of organic matter and bacterial biomass in the Kermadec Trench: testing the resource accumulation depth hypothesis

11:30  91  Bartlett DH, Tarn J, Kwan T et al - Microbial diversity in the Mariana and Kermadec Trenches

Biodiversity and ecosystem functioning – Microbial processes


12:00  93  (Pellizari VH) Queiroz LL, Duarte RTD, Graças DA et al - Microbial community composition in deep-sea sediments influenced by asphalt seep from South Atlantic Ocean

12:15  94  Szafrański KM, Deschamps P, Cunha MR et al - Colonization experiments using plant substrates reveal symbiont-related bacteria at hydrothermal vents and cold seeps

12:30  95  Bienhold C, Zinger L, Boetius A, Ramette A - Diversity and biogeography of bathyal and abyssal seafloor bacteria

12:45  Lunch (Grab & Go)

Pequeno Auditório

Biodiversity and ecosystem functioning – Seamounts

Chairperson: Telmo Morato

9:15  96  Morato T, Kvile KØ, Taranto GH, Pitcher TJ - A global assessment of seamount ecosystems knowledge using an ecosystem evaluation framework

9:30  97  Williams A, Althaus F, Schlacher TA - Towed camera imagery and benthic sled catches provide different views of seamount benthic diversity

9:45  98  Delavenne J, Pante E, Cairns S et al - New Caledonia seamounts habitats’ characterization and species associations’ description

10:00  99  Easton EE, Morales N, Gaymer CF, Sellanes J - Biodiversity of the seamounts of Easter Island Ecoregion

10:15  100  Payne RP, Samaai T, Gibbons MG, Florence WK - Taxonomy and diversity of the sponge fauna from Walters Shoal; a shallow seamount in the Western Indian Ocean region

10:30  Coffee break

11:00  101  Serpetti N, Lamont PA, Rogers AD et al - Top-down and bottom-up controls: macrofauna community structure of the Southwest Indian Ocean Ridge ecosystem

11:15  102  Kemp KM, Boersch-Supan P, Rogers AD - Pelagic fish community composition of the South West Indian Ocean ridge

11:30  103  Berning B, Souto J, Reverter-Gil O et al - Bathyal bryozoans from NE Atlantic seamounts and islands: biogeography, ecology and evolution

12:00 105 Gomes-Pereira JN, Tojeira I, Jesus D et al - Lusitanian seamounts upper bathyal habitats

12:15 106 Carvalho FC, Pomponi S, Cárdenas P et al - Diversity, distribution and phylogenetic relationships of bathyal lithistid sponges of the Macaronesian Islands and northeast Atlantic seamounts

12:30 107 Victorero L, Taylor M, Robinson L et al - Spatial patterns of biodiversity on Carter Seamount, Eastern Equatorial Atlantic; scales and drivers

12:45 Lunch (Grab & Go)

Thursday, September 3

Grande Auditório

Plenary session

8:30 4 Riehl T, Brandt A - On the depth origins of the deep-sea benthos

Biodiversity and ecosystem functioning – Vents, seeps and organic falls

Chairpersons: Hiromi Watanabe, Ana Hilário, Luciana Génio


11:00 109 Cordes EE - Deep sea ecological paradigms tested in coral and chemosynthetic communities

11:00 110 Mullineaux LS, Mills SW, Le Bris N et al - Resilience to eruptive disturbance in a deep-sea hydrothermal vent metacommunity

11:15 111 Husson B, Sarradin PM, Meneguex A, Sarrazin J - A first model to describe the functioning and dynamics of hydrothermal ecosystems

11:45 105 Lunch (Grab & Go)

11:45 112 Marlow J, Steele J, Case D et al - Carbonate-hosted methanotrophy: an unrecognized methane sink in the deep sea

11:00 113 Levin LA, Orphan V, Marlow J et al - Animal-microbe interactions on methane seep carbonates: considering methane consumption as an ecosystem service

11:15 114 Portail M, Olu K, Escobar-Briones E et al - Comparative study of vent and seep macrofaunal communities in the Guaymas basin

11:30 115 Sarrazin J, Lelièvre Y, Cuvelier D et al - Temporal studies of macrofaunal communities’ dynamics associated with a siboglinid assemblage using the NEPTUNE observatory

11:45 116 Watanabe H, Yamamoto M, Yahagi T et al - Habitat segregation in transition zones at hydrothermal vent fields in the Okinawa Trough, northwestern Pacific

12:00 117 Sumida PYG, Alfaro-Lucas JM, Shimabukuro M et al - Whale-fall community of the deepest natural carcass reported to date in the World’s Oceans (Southwest Atlantic Ocean)

12:15 118 Kalogeropoulou V, Keklikoglou K, Faulwetter S,
Lampadariou N - Functional distinctness of abyssal nematodes in the Eastern Mediterranean: a comparison between cold seeps and typical deep sea sediments

12:30  Lunch break

14:30  Johnson SB, Rouse GW, Lundsten L, Vrijenhoek RC - Any bone will do: the colonization of sunken bones by Osedax worms

14:45  Georgieva MN, Wiklund H, Bell JB et al - Bipolar tubeworms: Sclerolinum contortum from Antarctic hydrothermal vents and its affinity to northern hemisphere populations

15:00  Eilertsen MH, Kongsrud JA, Rapp HT - Evolutionary history of Ampharetinae (Ampharetidae, Annelida) adapted to chemosynthetic ecosystems

15:15  Hernandez-Avila I, Cambon-Bonavita M-A, Pradillon F - Morphology of first zoeal stage of alvinocarid shrimps from hydrothermal vents and cold seeps

15:30  Yahagi T, Watanabe H, Kojima S, Kano Y - Do larvae of hydrothermal vent animals disperse in surface water? Early life-history traits and population genetic structure of Shinkailepas myojinensis (Gastropoda: Neritimorpha)

15:45  Coffee break

16:15  Le Bris N, Thubaut J, Kalenitchenko D et al - Chemosynthetic habitats: fast colonization dynamics of woods by deep-sea symbiotic mussels in relation to sulfide enrichment


16:45  Laming SR, Gaudron SM, Cunha MR et al - Settled, symbiotic, then sexually mature: a comparative analysis of development, maturation, and nutritional flexibility across two diminutive deep-sea Bathymodioliinae (Mytilidae)

17:00  (Qiu J-W) Sun J, Wong YH, Xu T et al - Biomineralization toolkit in deep-sea mussels: insights from the mantle transcriptome and shell matrix proteome of Bathymodiolus platifrons

17:15  Van Campenhout J, Vanreusel A - Differential gene expression of closely-related cryptic Halomonhystera species from intertidal and deep-sea habitats

17:30  Shigeno S, Clark MR, Schnabel K et al - A hydrothermal vent fish reveals unique brain organization and adaptation to the extreme environment

17:45  Chen C, Copley JT, Linse K et al - Dragon heart and dragon scales: anatomy of the 'scaly-foot gastropod' (Mollusca: Gastropoda: Neomphalina)

Pequeno Auditório

Advances in taxonomy and phylogeny

Chairpersons: Ascensão Ravara et al

9:15  Williams ST - The impact of limited food resources on trophic shifts and rates of diversification in deep-sea

9:30  Hestetun JT, Vacelet J, Boury-Esnault N et al - Phylogenetic relationships of carnivorous sponges

9:45  Minin KV, Petrov NB, Vladychenskaya IP -
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<tr>
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<tr>
<td>10:00</td>
<td><strong>Evolutionary history of the echinid sea urchins: an evidence from molecular phylogeny</strong>&lt;br&gt;Rees DJ, Byrkjedal I, Sutton TT - Pruning the pearlsides: reconciling morphology and molecules in mesopelagic fishes (Maurolicus: Sternoptychidae)</td>
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<td>10:15</td>
<td><strong>Coffee break</strong></td>
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<td>10:45</td>
<td><strong>Bakken T, Oug E, Kongsrud JA, Alvestad T - Polychaetous annelids in the deep Nordic Seas: strong bathymetric gradients, low deep-sea diversity and underdeveloped taxonomy</strong></td>
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<td>11:00</td>
<td><strong>Coykendall DK, Morrison CL, Sanders LR, Nizinski MS - A molecular perspective on Anomuran biodiversity in northwestern Atlantic Ocean</strong></td>
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<td>11:15</td>
<td><strong>Havermans C - Insights into the phylogeny and phylogeography of deep-sea amphipods</strong></td>
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<td>11:30</td>
<td><strong>Lunina AA, Vereshchaka AL - Phylogeny of deep-sea shrimps in the extreme and regular habitats</strong></td>
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<td>11:45</td>
<td><strong>Kim SJ, Ju SJ - Mitogenomic phylogeny of the Thoracica (Crustacea, Cirripedia): evidences for the monophyly of hydrothermal vent barnacles</strong></td>
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<td>12:00</td>
<td><strong>Bergmeier FS, Schwabe E, Brandt A, Jörger KM - Disparate curiosities: an integrative approach to the diversity of abyssal Solenogastres in the Kuril-Kamchatka region</strong></td>
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<td>12:15</td>
<td><strong>Scott-Murray A, Linley TD, Jamieson AJ - Specimen archiving and illustration using 3D digital photogrammetry</strong></td>
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**Evolutionary history and fossil records**<br>Chairpersons: Cris Little, Luciana Génio

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<tr>
<td>14:30</td>
<td><strong>Little CTS, Kiel S - Evolutionary history of cold seep communities</strong></td>
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<td>14:45</td>
<td><strong>Higgs ND, Danise S - Fossil insights into the evolution of Osedax worms and the origin of the Siboglinidae (Annelida)</strong></td>
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<td>15:00</td>
<td><strong>Sigwart JD - Deep sea, deep time, deep trees: The role of wood fauna in biodiversity dynamics in present and past oceans</strong></td>
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<td>15:15</td>
<td><strong>Priede MIG - When was the deep-sea colonized by fishes?</strong></td>
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<td>15:30</td>
<td><strong>Thuy B, Gale AS, Kiel S et al - Exploring the evolutionary history of the deep-sea fauna using direct fossil evidence</strong></td>
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<td>15:45</td>
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**Connectivity and biogeography**<br>Chairpersons: Ana Hilário, Eva Ramirez-Llodra

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<tr>
<td>16:15</td>
<td><strong>Holland LP, Rowden AA, Clark MR et al - Connectivity of corals in the New Zealand region: can genetic resources inform management of Vulnerable Marine Ecosystems?</strong></td>
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<tr>
<td>16:30</td>
<td><strong>Zeng C, Kelly M, Rowden AA et al - Incongruent genetic connectivity patterns for demosponges off New Zealand: implications for the management of vulnerable marine ecosystems</strong></td>
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<tr>
<td>16:45</td>
<td><strong>Herrera S, Shank TM - Comparative population structure patterns of deep-sea hydrothermal vent</strong></td>
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17:00 150 Dahlgren TG, Wiklund H, Glover AG - Biogeography and connectivity of the Clarion-Clipperton Zone abyssal fauna: insights from recent cruises to the UK-1 claim area.

17:15 151 Janssen A, Raschka U, Martínez Arbizu P - Regional and local macrofaunal distribution patterns and genetic connectivity in abyssal Pacific polymetallic nodule fields (Clarion-Clipperton Fracture Zone).


Meeting Room

Special session on mining impact

Chairpersons: Adrian Glover, Craig Smith, Ana Colaço

9:15 190 Martins I, Goulart J, Marín S et al - Lucky Strike mussel Bathymodiolus azoricus exposed to Cu acute toxicity under pressurized conditions.


10:00 193 Carreiro-Silva M, Riou V, Reydet N et al - The effects of mining-generated sediment plumes on the physiology of the cold-water octocoral Dentomuricea.

10:15 194 Shulse CN, Maillot B, Nielsen TN et al - Microbial diversity and metabolic potential of a polymetallic nodule field.

10:45 195 Sweetman AK, Smith CR, Maillot B et al - Bacteria, not macrofauna, are key players in the short-term degradation of phytodetritus in abyssal.

11:00 196 Goineau A, Gooday AJ - Evaluation of benthic foraminiferal assemblage characteristic in the abyssal eastern equatorial.

11:15 197 Gooday AJ, Goineau A, Weber AAT - The biodiversity of xenophyophores (Rhizaria, Foraminifera) from the eastern Clarion Clipperton Zone (Equatorial Pacific).

11:45 198 Glover AG, Dahlgren TG, Wiklund H - Environmental stewardship of the central Pacific Clarion-Clipperton Zone mining frontier requires a vastly improved knowledge of species taxonomy and natural history.

12:00 199 Wiklund H, Dahlgren TG, Glover AG - Phylogenetics of the Clarion-Clipperton Zone abyssal fauna: species concepts, diversity and origins.

12:15 200 Amon DJ, Smith CR, Ziegler AF - Megafaunal community structure and biodiversity in the UK-1 claim area of the Clarion-Clipperton Zone.

12:45 201 Leitner AB, Drazen JC, Nunnally CC - Analysis of scavenging megafauna of the Clarion-Clipperton Zone using a baited camera.

Discussion
### Friday, September 4

**Grande Auditório**

#### Plenary session

<table>
<thead>
<tr>
<th>Time</th>
<th>Speaker(s)</th>
<th>Title</th>
</tr>
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<tbody>
<tr>
<td>8:30</td>
<td><strong>Ross RE</strong>, Nimmo-Smith WAM, Howell KL</td>
<td>Lagrangian model wars: comparing predictions of deep sea larval dispersal</td>
</tr>
<tr>
<td>8:45</td>
<td><strong>Breusing C</strong>, Biastoch A, Drews A et al</td>
<td>Population connectivity and dispersal of vent mussels from the Mid-Atlantic Ridge</td>
</tr>
<tr>
<td>9:00</td>
<td><strong>Wagner JKS</strong>, Ball B, LaBella A et al</td>
<td>SeepC: Mussel (&quot;Bathymodiolus childressi&quot;) population connectivity at trans-Atlantic seeps</td>
</tr>
<tr>
<td>9:15</td>
<td><strong>Bober S</strong>, Riehl T, Brix S et al</td>
<td>Does the Mid Atlantic Ridge affect the distribution of benthic crustaceans across the Atlantic Ocean? A morphological and genetical approach on Macrostylidae (Crustacea, Isopoda)</td>
</tr>
<tr>
<td>9:45</td>
<td><strong>Thistle D</strong>, Easton EE</td>
<td>On the size of species’ ranges in the sediment-covered deep sea</td>
</tr>
<tr>
<td>10:00</td>
<td><strong>Henry L-A</strong>, Ross SW, Messing CG, Roberts JM</td>
<td>Understanding extinction risk in the deep sea: Hydrozoan prospects</td>
</tr>
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<td>10:15</td>
<td><strong>Xavier JR</strong>, Marco J, Rapp HT, Davies AJ</td>
<td>Predicting suitable habitat for the bird’s nest sponge Pheronema carpenteri (Porifera, Hexactinellida) in the Northeast Atlantic</td>
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<td><strong>Howell KL</strong>, Alcock AL, Downie AL et al</td>
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<td><strong>Ross SW</strong>, Quattrini AM</td>
<td>Large scale patterns in community structure of continental slope fishes from the Gulf of Mexico to the US Middle Atlantic: effects of zoogeography, habitat, and oceanography</td>
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<td>11:00</td>
<td><strong>Bennecke S</strong>, Metaxas A</td>
<td>Effectiveness of a coral conservation area in the Gulf of Maine: distribution along the boundaries and changes in abundance of two deep-water octocoral species over 13 years</td>
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<td>11:15</td>
<td><strong>Van Dover CL</strong>, Kaiser C, Young CM et al</td>
<td>SeepC: Concept, design, and test of a high-resolution AUV Deep-Ocean Plankton Sampler (DOPS)</td>
</tr>
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<td>11:30</td>
<td><strong>Young CM</strong>, Maslakova SM, Hiebert T et al</td>
<td>Seep Connectivity (SEEPC): vertical distributions of larval forms in the deep Inter-American Seas</td>
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#### Connectivity and biogeography

**Chairperson**: Ana Hilário, Eva Ramirez-Llodra

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**Coffee break**

**Lunch break**

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13
14:30  167  Tittensor DP, Harfoot MBJ, Hilario A et al - Modelling large-scale dispersal patterns in the deep ocean

14:45  168  Mitarai S, Nakajima Y, Watanabe H et al - Quantifying hydrothermal vent connectivity in the Western Pacific

15:00  169  McVeigh DM, Eggleston DB, He R et al - Seep Connectivity (SEEP): Larval dispersal in the Intra-American Seas

15:15  170  Fernandez-Arcaya U, Company JB, Aguzzi J et al - Where are the post larvae of deep-sea megafauna species? The NW Mediterranean case study

15:30  171  Hardinge GE, Lucas CH, Thatje S, Okamura B - The global biogeography and morphology of two cosmopolitan deep-sea jellyfish, Atolla spp. and Periphylla periphylla (Scyphozoa, Coronatae)

15:45  Coffee break

Biodiversity and ecosystem functioning – Canyons
Chairperson: Ashley Rowden

10:45  176  Amaro T, Huvenne VAI, Allcock L et al - The Whittard Canyon – a key study example on canyon processes

11:00  177  Bourque JR, Demopoulos AWJ, Stamler KM et al - Meiobiofaunal community structure and function in relation to sediment biogeochemistry and canyon morphology in Baltimore Canyon, western Atlantic

11:15  178  Robertson CM, Bourque JR, Davies AJ et al - Unique macrofauna community dynamics in relation to sediment biogeochemistry and canyon morphology in Baltimore and Norfolk Canyons, western North Atlantic

11:30  179  Román S, Vanreusel A, Ingels J, Martín D - Spatial-temporal patterns of meiofaunal density in the Blanes submarine canyon (NW Mediterranean)

11:45  180  Almeida M, Company JB, Cunha MR - Spatial and temporal variability in suprabenthic assemblages in the Blanes canyon and adjacent open slope (Catalan sea, NW Mediterranean)

12:00  181  Rosli N, Leduc D, Rowden AA, Probert PK - Among-habitat differences in meiofaunal communities on the New Zealand continental margin: Do the small fauna exhibit the same patterns as larger fauna?

12:15  182  Bowden DA, Rowden AA, Leduc D et al -
Topographically-defined seabed habitats in the deep sea: do they really support distinct mega-epifaunal benthic communities and are such distinctions useful?

12:30 Lunch break

14:00 Frutos I, Sorbe JC - Suprabenthic assemblages from the Capbreton area (SE Bay of Biscay). Faunal recovery after a canyon turbiditic disturbance

14:15 Brooke SD, Watts MW, Heil AD et al - Distribution and habitat associations of deep water corals of the mid-Atlantic canyons

14:30 Bargain A, Foglini F, Pairaud I, Fabri M-C - Predictive habitat modeling of cold water coral distribution in two Mediterranean canyons

14:45 Morrison CL, Coykendall DK, Springmann MJ et al - A tale of four corals: patterns of genetic connectivity among submarine canyons in the northwestern Atlantic Ocean

15:00 Nizinski MS, Kinlan BP, Heyl TP, Shank TM - An integrated approach to predictive habitat suitability modeling and field surveys in Northwest Atlantic submarine canyons: model validation and habitat/faunal characterization

15:15 Ingels J, Allcock L, Bourque JR et al - The curious tale of Astomonema in the deep sea – a chemosynthetic worm feeling at home in submarine canyons

15:30 Guardiola M, Wangensteen OS, Taberlet P et al - Assessment of spatio-temporal community structure in submarine canyons using metabarcoding

15:45 Coffee break

Grande Auditório

Closing session

Chairpersons: Marina R Cunha, Ana Hilário

16:15 Brief overview of the Symposium, results of the voting for the next DSBS venue in 2018, awards and closing ceremony
Side events

Open meetings

Sunday, August 30

DAO (University Campus)

Open meeting of the Deep Ocean Stewardship Initiative (DOSI)

Organization: Lisa Levin, Maria Baker

Plenary session
9:00  Review the short history of DOSI to include an outline of the mission
9:30  Overview of DOSI activities to date
10:30 Coffee break
11:00 Overview of DOSI activities to date (continued)
11:45 Future planned activities
12:00 Open discussion
13:30 Lunch break
14:30 Working Group breakout meetings

Deep-Sea Tailing Placement
Promote responsible and sustainable deep-sea fisheries
Deep-sea genetic resources
Transparency, compliance and industry engagement

17:00 Wrap up

The Deep Ocean Stewardship Initiative (DOSI) seeks to integrate science, technology, policy, law and economics to advise on ecosystem-based management of resource use in the deep ocean and strategies to maintain the integrity of deep-ocean ecosystems within and beyond national jurisdiction. Learn more at www.indeep-project.org/deep-ocean-stewardship-initiative.

This open meeting will provide updates and status information about human activities, impacts, governance, regulation and conservation in the deep sea. Buffet lunch will be provided.

DOSI encourages new participants and invites all who are interested to attend. Support for this meeting is provided by the JM Kaplan Foundation and INDEEP.
Monday, August 31

Pequeno Auditório

DOSI town meeting

Chairpersons: Maria Baker and Lisa Levin

12:30 Brief overview of past and planned DOSI Working Group activities presented by Dr Lisa Levin (DOSI Co-Lead).

This meeting will provide further opportunity for the deep-sea community to connect and engage with DOSI and to propose and lead further actions pertaining to the DOSI mission statement (DOSI seeks to integrate science, technology, policy, law and economics to advise on ecosystem-based management of resource use in the deep ocean and strategies to maintain the integrity of deep-ocean ecosystems within and beyond national jurisdiction).

Grande Auditório

Deep-Sea Biology Society plenary meeting

Chairperson: Craig McLain

18:00 Overview of the DSB Society activities presented by the President (Craig McLain); information on the services and communication media (Holly Bik). Presentations of the proposals for the next symposium venue (voting during the week)

Tuesday, September 1

Pequeno Auditório

InterRidge open meeting

Chairpersons: Anna Metaxas, Lauren Mullineaux

12:45 Activities of the WG on Ecological Connectivity and Resilience:

The ecological connectivity of vent communities, and their resilience in the face of disturbance, has been a hot topic of research ever since their discovery. Of late, this topic has become particularly timely and societally relevant as plans for deep-sea mining progress toward implementation. It is also directly relevant to management decisions under consideration for recently designated deep Marine Protected Areas (MPAs), such as those on the Endeavour Segment, in the Marianas region, on the mid-Atlantic Ridge off the Azores, and in the Guaymas Basin and Eastern Pacific Rise. This meeting will provide the opportunity to all those interested in hydrothermal vent studies to connect and engage with this working group.

SOPHIA Studio

DGRM science-policy panel on the deep seas

Organization: Portuguese Directorate-General for Marine Resources

09:15 Tools and models available for the management of deep-sea
ecosystems: The role of Science, Governments and International Organizations

10:15 **Coffee break**
10:45 Marine Protected Areas and their role in the management of deep-sea ecosystems
12:30 **Lunch break**

A panel of managers from the Portuguese administration will meet around the table with invited scientists to share their perspectives on current and expected conservation problems in the deep-sea. The discussion will be mediated by the **Portuguese Directorate-General for Marine Resources, Environment and Maritime Affairs (DGRM)**. The panel is expected to contribute state-of-the-art approaches to establishing MPAs in the deep-sea, and how they shall be managed to achieve their goal. Experience-based contributes to improve the effectiveness of MPA management will be most welcome.

The **DGRM** science-policy panel aims at discussing and improving current ideas on the functions and management of large MPAs in deep-water habitats. DGRM wishes to capitalize on the presence of invited guests and international researchers coming to Aveiro for the 14DSBS meeting.

**DGRM** is the department of the Portuguese administration entitled to plan and carry out policies to the preservation and science-based use of marine resources. Its functions include setting-up fishing policies and fish-farming, in connection to related processing industries. Control of shipping traffic, vessel inspections, port state control and management of harbour activities also fall in the scope of DGRM. There is one specific working unit (DSAS) to delineate and promote conservation strategies for MPAs designated at national, EU or international level. This unit also coordinates the participation of Portugal in the OSPAR Convention for the Protection of the Marine Environment of the North-East Atlantic.

The ultimate goal of this exercise is building up a long-lasting contribution from Portugal to help the sustainability of Ocean ecosystems and ensure wise use of global marine resources.

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**Pequeno Auditório**

**Launching of EMB position paper**

**Organization**: European Marine Board

18:00 **Launch event** of European Marine Board position 22 **“Delving Deeper: Critical challenges for 21st century deep-sea research”** - opening statements by MEP Ricardo Serrão Santos, Portuguese government representative (tbc) and a presentation of the position paper by EMB Working Group Chair Professor Alex Rogers

19:00 **Reception**

and the need for effective and practicable governance frameworks to underpin the management of deep-sea activities and resources.

The WG was set up in January 2014 and consists of 14 experts spanning natural sciences, socio-economics and marine law who have examined the key societal and environmental drivers confronting the deep sea, and the role of deep-sea research to deliver future knowledge needs for science and society. The WG also engaged throughout with wider stakeholders spanning the deep-sea research community, industry (deep sea mining, oil and gas, renewable energy, marine biotechnology and deep sea fisheries), civil society (NGO sector) and policy. Stakeholder workshops and online consultations were used to assess perspectives and trends on deep-sea research investments across Europe (see also oral presentation #22 by Donaldson et al.). A clear and consistent message from consultation with these non-science stakeholders was the need for fundamental deep-sea scientific knowledge as the evidence base for establishing baselines, informing Environmental Impact Assessments and monitoring long term impact of human activity on deep-sea ecosystems.


Thursday, September 3

Pequeno Auditório

DOSI WG5 marine genetic resources workshop

Organization: DOSI, Harriet Harden-Davies

12:45 Accessing and sharing benefits from marine genetic resources beyond national jurisdiction: What role for the scientific community?

Deep-sea marine genetic resources in areas beyond national jurisdiction have generated an intense international debate on access and benefit sharing. The expertise of the marine scientific community is of critical relevance to the resolution of this debate. This is both timely and important as the issue of marine genetic resources is at the core of a process that in 2015 is likely to trigger the start of international negotiations for a new legal instrument for the conservation and sustainable use of biodiversity beyond national jurisdiction. This workshop aims to invite and discuss scientific perspectives on the legal debate on deep-sea genetic resources, relevant drivers and barriers to conducting deep-sea research and challenges and opportunities at the science-policy interface. All delegates with an interest in ocean governance and deep-sea research are warmly invited to participate in this discussion on how the scientific community might ‘reality-check’ this international debate and develop ideas for how a new regime could facilitate research and innovation.
Friday, September 4

Pequeno Auditório

INDEEP town meeting
Chairperson: Maria Baker

12:30 The INDEEP PIs, Oversight Committee and Working Group leads will present a brief update on INDEEP Phase 2 activities and future plans.

The key aim of the gathering is to generate audience participation in discussions relating to the future of INDEEP and to identify new project ideas and leads for those projects within the realms of overarching INDEEP aims (i.e. to develop and synthesise our understanding of deep-sea global biodiversity and functioning and provide a framework to bridge the gap between scientific results and society to aid in the formation of sustainable management strategies). The membership of each working group is open and envisioned to evolve and change in response to ongoing research activities.

Restricted meetings

Wednesday, September 2

Meeting Room

SEAFOAM WG meeting
Chairperson: Robert George

14:30 WG meeting for SEAFOAM members and associate members

Friday, September 4

Pequeno Auditório

INDEEP committee meeting
Chairperson: Maria Baker

18:00 Committee meeting for INDEEP partners
Posters

Posters are on display during all week in:

**Room 1** (Level 1, front side)
Stewardship of our deep oceans (DOSI), natural and anthropogenic disturbance

**Room 2** (Level 1, east side)
Biodiversity and ecosystem functioning (pelagic and hadal systems, seamount, canyon and coral habitats, vents, seeps and organic falls)

**Hall 1** (Level 1, front side) – Connectivity and biogeography

**Hall 2** (Level 2) – Trophic ecology, autoecology, advances in taxonomy and systematics, evolutionary history and fossil records

**Main poster session:**
Thursday, September 3 from 18:00 to 19:30

**Extended lunch breaks:**
Tuesday, September 1 from 12:30 to 14:30
Thursday, September 3 from 12:30 to 14:30

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**Room 1**

**Stewardship of our deep oceans**

202 **Turner PJ**, Van Dover CL - Conservation of rare species in the deep-sea: understanding importance and methodology

203 **Metaxas A**, Desilets K, Bennecke S, Lacharité M - Deep-water corals, biodiversity and conservation on the NW Atlantic continental margin: scientific collaboration informing conservation

204 **García-Alegre A**, Sánchez F, Gómez-Ballesteros M, Rodríguez A - Habitat suitability model as a tool to optimize data and improve species distribution mapping on a deep-sea ecosystem: El Cachucho Marine Protected Area

205 **Filander Z**, Sink K, Samaai T et al - Identifying and mapping sensitive deep-sea ecosystems in South Africa

206 **Simon-Lledo E**, Vierod ADT, Davies AJ - Habitat suitability for deep-sea stony corals in the Mediterranean Sea

207 **Cobley AC**, Piechaud N, Howell KL - Predictive bioregionalisation modelling of the global deep-sea benthos by physio-chemical properties and its application to a Marine Protected Area (MPA) network design

208 **Gougeon S**, Kemp K, **Yesson C** - Mapping and classifying the seabed of West Greenland

209 **Hourigan TF**, **McGuinn RP**, Dornback M et al - Linking science to management: NOAA’s Deep-Sea Coral and
Sponge Database and Map Portal

210 **Baker M**, Ramirez-Llodra E, Menot L et al - INDEEP NOW!

211 **Steeds O**, **Ross SW**, Wallace J - NEKTON launches Project Twilight

212 **Afonso RM**, Laranja A, Morim S et al - Within sight, within the mind… How to mobilize the public to foster deep-sea conservation?

**Anthropogenic disturbance**

213 **Danovaro R**, Gambi C, Corinaldesi C et al - Effects of anthropogenically-mediated disturbance events on benthic functioning and diversity: the case study of the Palinuro Seamount (Tyrhenian Sea, Central Mediterranean)

214 **Yesson C**, Kemp K - Benthic habitats of the West Greenland shelf: What is the impact of shrimp trawling?

215 **Vieira RP**, Bett BJ, Morris K et al - Quantifying trawling impacts on benthic megafauna in the Porcupine Seabight (bathyal NE Atlantic)

216 **Ramalho SP**, Lins L, Pape E et al - Impact of trawling on benthic diversity and functioning at the SW Portuguese continental slope

217 **Bueno J**, Garcia-Alegre A, Ramalho SP et al - Characterization of deepwater crustacean trawl fisheries in the Portuguese continental margin

218 **Mytilineou C**, Gavra M, Anastasopoulou A et al - Trawling impact on the cold-water corals in the SE Ionian Sea

219 **Atkinson LJ**, Attwood CG, von der Meden CEO, **Sink KJ** - Benthic trawl experimental closure: Can habitat recover?

220 **(Bailey DM)** Milligan RJ, Bett BJ, Clarke J et al - Seasonal change in deep water fish abundance but not community structure off West Africa: results of the DELOS Industry-Academic partnership

221 **Heyl TP**, Nizinski MS, Kinlan BP, Shank TM - Composition, distribution and abundance of anthropogenic marine debris in Northwest Atlantic submarine canyons

222 **Cordes EE** - Deep ocean stewardship issues related to the oil & gas industry

223 **Gobin JF**, Amon DJ - Methane seeps and oil exploration off the east coast of Trinidad and Tobago

224 **Girard F**, Berlet SP, Fisher CR - Understanding the impact of the Deepwater Horizon oil spill on coral communities in the deep Gulf of Mexico: the importance of symbiosis

225 **Bourque JR**, Demopoulos AWJ, Fisher CR - Temporal variability of deep-sea coral-associated macrofauna in the Gulf of Mexico after the Deepwater Horizon oil spill

226 **Järnegren J**, **Brooke SD** - Impact of drill cuttings on the larval stages of the cold-water coral, Lophelia pertusa

227 **Hoyt SP**, Smith S, Van Dover CL - Structuring environmental mitigation strategies for the emerging deep-sea mining industry
Mining impact - the Clarion-Clipperton Fracture Zone

228 Kersten O, Smith CR, Vetter EW - Abyssal benthopelagic zooplankton in the Clarion Clipperton Zone

229 Goineau A, Gooday AJ - Radiolarian tests as snug microhabitats for novel ‘squatter’ benthic foraminifera: observations from the abyssal eastern equatorial Pacific (Clarion–Clipperton Fracture Zone)

230 Kamenskaya OE, Gooday AJ - Xenophyophorea and Komokiacea (Protista, ?Foraminifera) from the French claim area of the Clarion-Clipperton Fracture Zone

231 Macheriotou L, Vanreusel A, Leliaert F - Diversity and biogeography of deep-sea nematodes in the Clarion-Clipperton Fracture Zone: integrating morphology and genetics

232 Kim D, Min W, Rho H et al - Standing stocks and distributional patterns of meiobenthos on the deep seafloor of KODOS area in the Clarion-Clipperton Fracture Zone (NE Pacific)

233 Mohrbeck I, Janssen A, Kaiser S et al - Isopod distribution patterns in polymetallic nodule fields: German vs UK License Area

234 Glover AG, Dahlgren TG, Wiklund H, Smith CR - DNA taxonomy and population connectivity (macrofauna and megafauna) methods for work in the abyssal Clarion-Clipperton Zone (CCZ), central Pacific Ocean

235 Simon-Lledo E, Solan M, Huvenne VAI, Jones DOB - Megafaunal biodiversity assessment of the APEI-4 zone of the CCFZ, North Pacific

236 Ziegler AF, Amon DJ, Smith CR - A qualitative assessment of megafaunal diversity and biogeography of the UK-1 mining claim area within the CCZ

237 Yu OH, Kim D, Kim KH et al - An environmental baseline study of the macrobenthos from the KR5 block of the Korea Deep Ocean Study (KODOS) area, Northeastern Pacific

238 Radziejewska T, Wawrzyniak-Wydrowska B, Rokicka-Praxmajer J - Twenty years later or follow-up research at an experimental disturbance test site in the Clarion-Clipperton Fracture Zone (CCFZ, sub-equatorial NE Pacific) nodule field: the IOM BIE case study

239 Sweetman AK, Smith CR - First assessment of the importance of dark inorganic carbon fixation in abyssal sediments of the equatorial Pacific

Global change and natural disturbance

240 Smith CR, Grange LJ, Honig D et al - Antarctic fjord biodiversity hotspots, ecosystem function, and response to climate change – the FjordEco Project

241 Lartaud F, Peru E, Le Bris N - Impact of climatic events on deep-sea ecosystems: the response of cold-water corals to dense water shelf cascades

242 Milligan RJ, Townsend S, Bett BJ et al - Boom-bust population dynamics of a deep-sea holothurian – understanding the ‘Amperima Event(s)’

243 Sperling EA, Frieder CA, Levin LA - Natural gradients on continental margins reveal macrofaunal biodiversity response to multiple climate stressors

244 George RY - Abuse of the abyss: anthropogenic threats
to seamount biodiversity with focus on ocean acidification

245 Kitahashi T, Jenkins RG, Kojima S, Shimanaga M - Meiofaunal assemblages along the landward slope of the Japan Trench after the 2011 Tohoku Earthquake

246 Plum C, Fujiwara Y - Effects of the Tohoku tsunami and subsequent sunken debris on the benthic meiofauna off Tohoku coast

247 Cardoso C, Gomes T, Blasco J et al - Antioxidant defense mechanisms against metal stressors in the commensal polychaete Branchipolynoe seepensis and the host mussel Bathymodiolus azoricus from the Mid-Atlantic-Ridge (MAR)

248 Neira C, Ingels J, Puritty C et al - meiofaunal community structure within and beneath the oxygen minimum zone at the Costa Rica continental margin

249 Tunnicliffe V, Chu J, Soderberg N, Juanes F - Metabolic and growth responses to hypoxia in a highly tolerant flatfish in the Northeast Pacific

250 Mestre NC, Cottin D, Bettencourt R et al - Is the deep-sea crab Chaceon affinis able to induce a thermal stress response?

Hall 1

Connectivity and biogeography

251 Teixeira S, Decker C, Fuchs S et al - Connectivity in deep-sea fragmented ecosystems

252 LaBella AL, Cunningham C, Van Dover CL - Using species histories to contextualize modern genetic connectivity in the vesicomyid genera Abyssogena and Calyptogena

253 Van Dover CL, Young CM, Maslakova S et al - Seep Connectivity (SeepC): Oceanographic and life-history processes underlying genetic structure in western Atlantic seep populations

254 Van Dover CL, Fraser ME, Jacobsen K et al - SeepC: Shifting perspectives: artists in the ocean


256 Young CM, Burgess A, Plowman C et al - Seep Connectivity (SEEPC): Expensive deep-sea larval traps that don’t catch larvae and an inexpensive alternative that works

257 Meyer KS, Young CM, Sweetman AK et al - Deep-sea dropstone communities as a testing ground for classical island hypotheses

258 Matos FL, Company JB, Cunha MR - Connecting dots across Western Mediterranean submarine canyons: seascape connectivity of Lophelia pertusa

259 Dueñas LF, Tracey DM, Crawford AJ et al - Diversification of two deep-sea Primnoid octocorals across the Antarctic Circumpolar Current

260 Jang SJ, Won YJ - Study of evolutionary relationship between hydrothermal vent tubeworm (Ridgeia
**261 Sun J, Xu T, Watanabe H et al** - A resource of draft genomic sequences and genome-wide single nucleotide polymorphisms/variants in deep-sea mussels

**262 Lee WK, Roterman CN, Won YJ** - Phylogeography of Kiwa (Decapoda: Anomura) including Kiwa n. sp. from the Australian-Antarctic Ridge

**263 Piechaud N, Downie AL, Stewart HA, Howell KL** - Predicting outside the box: can predictive species distribution models be transferred between sites?

**264 Pradillon F, Bignon L, Cotty C et al** - SALSA : Serial Autonomous Larval Sampler

**265 (Rakka M) Orejas C, Jiménez C, Abu Alhaija R et al** - The cold-water corals of Cyprus: Environmental settings and ecological features (CYPrus Cold-corals Levantine SeA, Eastern MEDITerranean: CYCLAMEN)

**266 Krylova EM, Ivanov DL, Mironov AN, Dilman AB** - Arctic abyssal fauna of bivalve molluscs

**267 Lejzerowicz F, Pawlowski J** - Sampling deep-sea sediment for sequencing the Foraminifera diversity: an example of patchiness from the Southern Ocean

**268 Hernandez-Avila I** - Patterns of deep-water diversity in the Caribbean is repeated along taxa

**269 Plaiti W, Almeida M, Sardá F, Tselepides A** - Comparisons of deep water macrofauna assemblages from the East Ionian and Balearic Seas (Mediterranean)

**270 Fadeeva NP, Mordukhovich VV, Zograf JK** - The diversity and biogeography of the free-living nematode (Nematoda: Desmodoridae) from the Northwestern Pacific

**271 Suarez Mozo NY, Hendrickx ME** - Deep-water chitons (Mollusca: Polyplacophora) from off the west coast of Baja California, Mexico

**Room 2**

**Biodiversity and ecosystem functioning**

**Pelagic systems**

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