AGENDA

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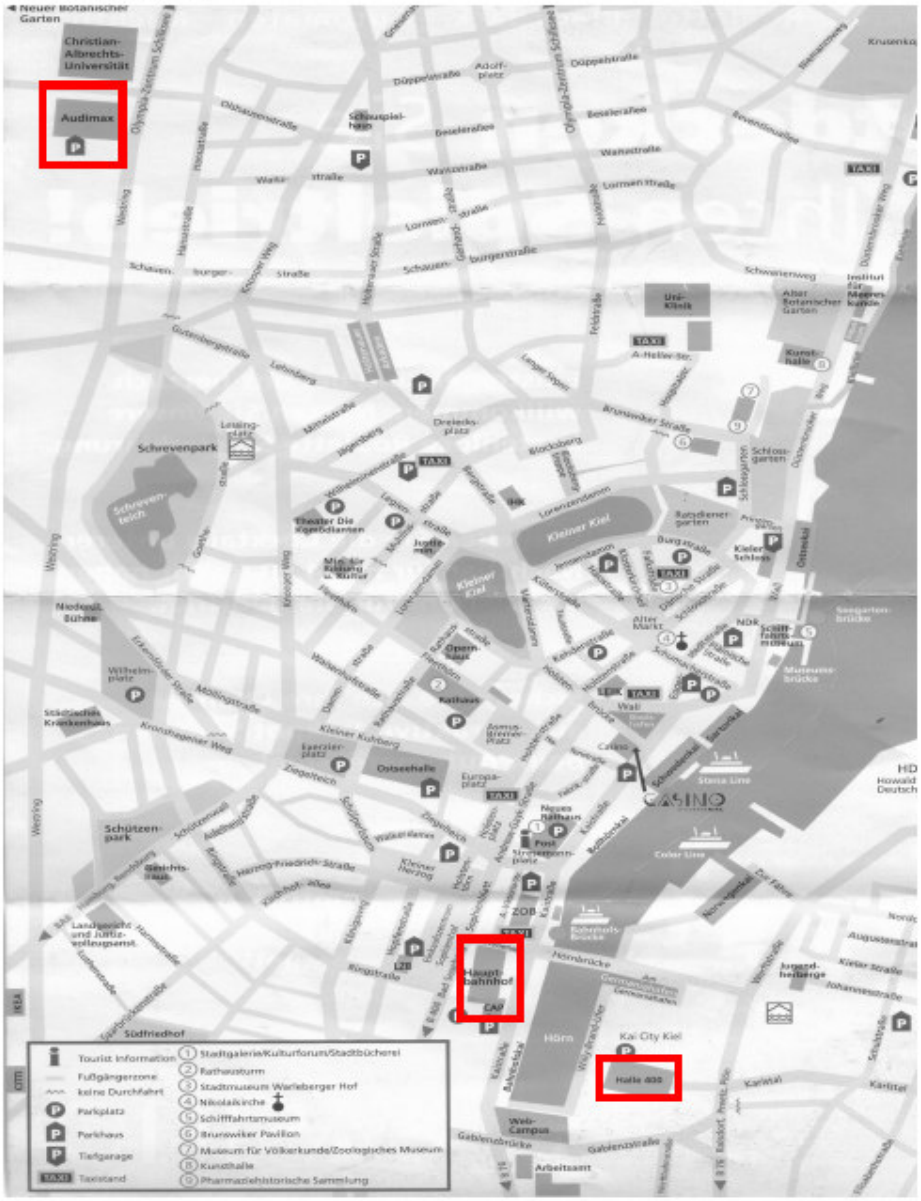
Description of way



Audimax:
From Kiel main station the busses 81/82 towards `Botanischer Garten` as well as 61 towards `Suchsdorf` and 62 towards `Projensdorf` respectively stop directly at university station (`Universität`). On the opposed side of the street you can see the Audimax building.

Halle 400:
To the `Halle 400` you walk behind the Kiel main station over the pedestrian bridge (Hörnbrücke) and follow the water (Hörn) to your right (Willy-Brand-Ufer). The `Halle 400` is situated short before the end of the Hörn on the left side.

EMBS 42 August 27 – 31 2007, Kiel

TENTATIVE AGENDA

Sunday, August 26: Arrival and Ice Breaker

15:00 – 19:00	Conference Registration opens
17:00	Ice Breaker

Monday, August 27

8:00	Conference Registration opens
9:00	Welcome & Introductory Remarks Prof. Ulrich Sommer, Minister Dietrich Austermann (Ministerium für Wissenschaft, Wirtschaft und Verkehr) Prof. Thomas Bauer (Director auf CAU) Prof. Artemis Nicolaidou (EMBS President)
10:00	**Keynote lecture** *M. Latif:* **The Climate of the 21st Century**
10:30 *Coffee Break*	

	Hall I: **Theme Block "Global Change"** **IR-Symposium # 2: Effects of Climate Change on Marine Ecosystems** **Chair: *Howard Browman***	**Hall II:** **Theme Block "Complex Interactions"** **Trophic Interactions** **Chair: *Martin Wahl***	**Hall III:** **Theme Block "Invasion, Biodiversity, Topics outside the main themes"** **Invasion Ecology** **Chair: *Mark Lenz***
11:00	*H. Markham:* Assessment of the extent of bleaching and recovery rates of corals in Diego Suarez Bay, Northern Madagascar	**Keynote lecture** *H. Hillebrandt:* **Diversity in multitrophic interactions - explaining the biocomplexity of food webs**	*K. Reise:* Marine coastal communities teared apart in an eventful history
11:15	*C. Frid:* Climate, fishing and observing change in a North Sea benthic system: A 33 year time series		*J.A. Kochmann:* Effects of alien oysters and native mussels as ecosystem engineers on benthic diversity – a field experiment in the Wadden Sea
11:30	*B. MacKenzie:* Impact of 21st century climate change on the Baltic Sea fish community and fisheries	*C. Vinagre:* Nursery fidelity, food web interactions and primary sources of nutrition of the juveniles of *Solea solea* and *S. senegalensis* in the Tagus estuary (Portugal): a stable isotope approach.	*K. Troost:* Competition between native bivalves and an introduced oyster through larviphagy
11:45	*G. Shulman:* Transformation of food biochemical components in the Black Sea fishes	*S. Diàs:* Trophic dynamics of a riverine population of Yellow Eel (Rio Esva, northwestern Spain)	*A. Markert:* New oyster reefs in the East Frisian Wadden Sea: *Crassostrea gigas* affects the community structure of native Blue Mussel beds
12:00	*B. Sundelin:* Climate stress increased sensitivity to parasites in the Baltic amphipod *Monoporeia affinis*	*R. Sousa:* Macrozoobenthic distribution along the River Minho estuarine gradient (NW of Iberian Peninsula)	*H. Büttger:* Mussel beds turning to oyster reefs – how does the community respond?
12:15	*A. Eriksson Wiklund:* An amphipod population crash - possible causes and future consequences	*T. Amaro:* Feeding strategies of deep-sea holothurians in the Portuguese canyons	*M. Katolikova:* The invasion of the Pacific mussel *Mytilus trossulus* into the White, Barents and NE North Sea
12:30-14:00 *Lunch Break*			

14:00 - 16:00	**Global Change** **Chair: *Ulf Riebesell***	**Trophic Interactions** **Chair: *Catarina Vinagre***	**Invasion ecology** **Chair: *Karin Troost***
14:00	**Keynote lecture** *H.O. Pörtner:* **Physiological mechanisms linking climate to ecosystem change**	*G. Andrew:* Trophic interactions on rocky shores: stable isotope evidence for the importance of macroalgae to the diets of intertidal grazing gastropods	*E. Johnston:* The role of pollution in facilitating marine invasions
14:15		*J. Dannheim:* Specialists, omnivors and diet shifters: a trophic niche triangle in soft-bottom benthos	*A. Amaral:* Representativeness of non-native species on azorean subtidal sub-biotopes
14:30	*H. Browman:* Ultraviolet radiation impacts on the early life stages of zooplankton and fishes	*U. Jacob:* Wait to be seated – how to measure consumer trophic level in nature's restaurant	*M.S. Thomsen:* Benthic marine NIS in Denmark – with emphasis on highly invasive seaweeds
14:45	*R. Müller:* The effects of stratospheric ozone depletion and of global warming on Arctic and temperate kelp species (Laminariales, Phaeophyceae)	*A. Razinkovas:* Application of stable isotope analysis and balance model to quantify boreal coastal lagoon food web	*C. Buschbaum:* Positive effects of a bad invader – The case of the Japanese Seaweed *Sargassum muticum* in the south eastern North Sea
15:00	*G. Lannig:* Reduced temperature tolerance in cadmium-exposed oysters: Mismatch between O_2-demand and O_2-supply	*C. Rodrigues:* Nutritional relations in deep-sea macrofaunal communities from Gulf of Cadiz (southern Iberian margin): a stable isotope approach	*F. Weinberger:* *Gracilaria vermiculophylla* has arrived in the Baltic Sea: How strong will be its ecological impact?
15:15	*D. Schiedek:* Geographical patterns in ecophysiological traits of the bivalves *Mytilus spp.* and *Macoma balthica* along the European coast: effects of region-specific environmental conditions and global changes	*R. Connolly:* Carbon pathways in coastal foodwebs: stable isotope evidence further enriched	*J. Dierking:* Effects of the introduced predatory fish *Cephalopholis argus* on native reef fish populations in Hawaii
15:30	*M. Mohlin:* Interaction effects of high irradiances and nutrient concentrations on the cyanobacterium Nodularia spumigena from the Baltic Sea	*D. Banaru:* Influence of the Danube inputs on C and N stable isotope ratios of the Romanian Black Sea coastal waters and sediment	*D. Haydar:* Historical shipping shaping distribution patterns of marine invertebrates in the North Atlantic ocean
15:45	*P. Stähr:* Ocean climate controls the temperature dependency of metabolic rates in macroalgae: Importance for species distributions	*N. Aberle:* Inter- and intra-specific variations in stable isotope fractionation: experimental studies simulating pelagic multi-trophic systems	*G. Spindler:* Introduced vs. local communities – performance of non-indigenous assemblages in their new range
	16:00 – 16:30 *Coffee break*		

16:30 – 18:00	**Global Change** **Chair: *Doris Schiedek***	**Trophic Interactions** **Chair: *Nicole Aberle***	**Invasion ecology** **Chair: *Inken Kruse***
16:30	*U. Sommer:* The Kiel AQUASHIFT-mesocosms study: conceptual basis and experimental design	*M. Casini:* Switches in zooplankton regulation mechanisms: piscivore/zooplanktivore dynamics regulate the strength of top-down and bottom-up forces in a pelagic marine ecosystem	**Keynote lecture** *E. Leppäkoski:* **Invasion pressure to European brackish seas**
16:45	*K. Lengfellner:* Global warming and the possible disruption of planktonic succession patterns during spring time	*F. Hansen:* Trophic importance of ciliates for the reproduction of *Acartia clausi*	
17:00	*J. Wohlers:* The cycling of organic matter during a spring bloom in a warming ocean – an indoor mesocosm study	*V. Lauringson:* Do benthic suspension feeders feed selectively on diatom species in the shallow coastal ecosystem of the Baltic Sea?	*J. Kotta:* Habitat-specific fish predation explains the current range of the invasive amphipod *Gammarus tigrinus* in the northern Baltic Sea
17:15	*P. Breithaupt:* Effects of different temperature regimes on the coupling between phyto- and bacterioplankton during an algal spring bloom – a mesocosm study	*M. Nordström:* Temporal variability of a benthic food web and the inertia of a low-diversity system	*M. Lenz:* Age is a good predictor for the stability of marine fouling communities – Results from a study replicated globally at different spatial scales.
17:30	*K. Walther:* Cell-specific activity and bacterial community composition along a temperature gradient during an algal spring bloom – a mesocosm study	*K. Rosqvist:* Land uplift or traditional succession - formation of small lagoons in the northern Baltic Sea	*K.R. Nicastro:* Sand, waves, heat stress and habitat segregation between invasive (*Mytilus galloprovincialis*) and indigenous (*Perna perna*) mussels in South Africa
17:45	*J. Piontek:* Effects of rising temperature on the microbial decomposition of particle aggregates in the ocean	*K. Sundbäck:* Complex response of shallow-water sediment systems to combined effects of nutrients and contaminants	*F. Rigal:* Is larval release at low temperature a waste? An investigation in the invasive slipper limpet *Crepidula fornicata*

Tuesday, August 28

8:00	Conference Registration opens		
	Hall I: **IR-Symposium # 2: Effects of Climate Change on Marine Ecosystems** **Global Change** **Chair: *Ulf Riebesell***	**Hall II:** **"Complex Interactions"** **Trophic Interactions** **Chair: *Jörn Schmidt***	**Hall III:** **"Invasion, Biodiversity, Topics outside the main themes"** **Invasion Ecology** **Chair: *Erik Bonsdorff***
9:00	**Keynote lecture** *N.C. Stenseth:* **Effects of Climate Change on marine Ecosystems**	*S. Garthe:* Foraging strategies of the largest North Atlantic seabird, the northern gannet (Sula bassana): Changing environments, flexibility and opportunistic predation	*G. Zardi:* Larval dispersal, selection and the genetic structure of indigenous (*Perna perna*) and invasive (*Mytilus galloprovincialis*) mussels in South Africa
9:15		*H. Dries:* Distribution patterns of swimming crabs (Liocarcinus spec.) in the German Bight and their significance for foraging seabirds	*J. Javidpour:* The *Mnemiopsis leidyi* -invasion of the Baltic Sea: the first 10 months and a comparison to other ctenophore
9:30	*B. MacKenzie:* Daily ocean monitoring since the 1860s shows unprecedented warming of northern European seas	*N. Markones:* What you always wanted to know about fish and never dared to ask seabirds	*T. Shiganova:* Comparison of morphophysiological variability of *Mnemiopsis leidyi* and population size in different recipient environments of the Southern Seas
9:45	*J. Alheit:* Teleconnection patterns of impact of climate variability on pelagic ecosystems across Europe	*R.A. Coleman:* Food supply and foraging behaviour: Attacks by oystercatchers on aggregated prey	*T. Shiganova:* Pathways of invasion, establishment and distribution of alien species in the Ponto-Caspian
10:00	*K. Wiltshire::* Regime Shifts in the North Sea: an analyses of the Helgoland Roads long term data set	*G. Nehls:* Bird responses to vanishing mussel stocks of the Wadden Sea – can a single species be so important?	*M. Vyssokikh:* Luminescence in Polynoid Worms
10:15	*C. Gehling:* Changes in depth distribution and biomass of sublittoral seaweeds at the island of Helgoland (German Bight, North Sea): a comparison between 1970 and 2005	*P. Schwemmer:* Feeding ecology and habitat utilization of the black-headed gull (*Larus ridibundus*) at the coastal zone of the German North Sea	
	10:30 – 11:00 *Coffee Break*		

11:00 – 12:30	**Global Change** **Chair: *Joan Kleypas***	**Trophic Interactions** **Chair: *Ross Coleman***	**Ecosystem Consequence of Biodiversity Change** **Chair: *Erik Bonsdorff***
11:00	*J.L.S. Hansen:* Effect of climate change on oxygen condition below the halocline in the Danish Straits at the entrance to the Baltic Sea	*M. Plyuscheva:* The diet of two scale worms Lepidonotus squamatus and Harmothoe imbricata (Polychaeta, Polynoidae) in the White Sea.	**Keynote lecture** *T.H. Pearson:* **Biodiversity effects on ecosystem function** **Keynote lecture**
11:15	*V. Freitas:* Impact of climate change on productivity of shallow temperate coastal areas along the European coast: an analysis by means of dynamic energy budgets	*S. Lischka:* Life-history traits and feeding habits of the two copepods Pseudocalanus minutus (Calanoida) and Oithona similis (Cyclopoida) in the Arctic Kongsfjorden (Svalbard)	
11:30	*B. Karlson:* Phytoplankton community change in the Baltic and the Skagerrak area - is there a climate connection?	*S. Kruse:* Abundance, diversity and ecology of midwater chaetognaths during Antarctic winter in the Lazarev Sea, Southern Ocean	*M. Cusson:* Species richness and the stability of marine ecosystems: comparisons of relationships at a European scale using meta-analysis
11:45	*G. Clark:* The role of sea-ice in maintaining near-shore benthic diversity in the Windmill Islands, East Antarctica: implications of global warming	*D. Stübing:* Seasonal dynamics in feeding habits of Antarctic krill as indicated by trophic marker fatty acids and digestive enzymes	*B. Matthiessen:* Mechanisms of species coexistence regulate the diversity ecosystem functioning relationship
12:00	*J. Molinero:* Hemispheric climate oscillations and the Mediterranean Sea – identifying relationships between plankton, hydrological patterns and climate	*K. Mintenbeck:* Fish in the high Antarctic food web – in search of Achilles' heel	*J. Canning-Clode:* Estimating Regional richness in marine benthic communities – The influence of replication
12:15	*N. Wasmund:* Changes in the phytoplankton community of Kiel Bight (Baltic Sea) during the last century	*K. Bluhm:* Hydrogen Peroxide decomposition by Southern Ocean Diatoms	*L. Ljunggren:* Fisheries management - a powerful tool to combat eutrophication problems?
		12:30 – 14:00 Lunch Break	
14:00 – 15:30	**Global Change** **Chair: *Gisela Lannig***	**Trophic Interactions** **Chair: *Georg Pohnert***	**Biodiversity** **Chair: *Karsten Reise***
14:00	*H. Tsutsumi:* Global warming and destruction of pelagic-benthic ecosystem in enclosed bays	*M. Boersma:* Seasonal dynamics of *Temora longicornis* on the Helgoland Reede	*M. Lof:* Genetic diversity in the Baltic Sea amphipod *Monoporeia affinis*
14:15	*D.K. Barnes:* How robust is Antarctic shelf biodiversity to predicted climate change?	*H. Christie:* Structure and function of mobile macrofauna associated to macrophytes	*L. Airoldi:* Causes and consequences of the loss of canopy-forming macroalgae

14:30	*C. Dubischar:* Seasonal cycles of *Salpa thompsoni* and *Ihlea racovitzai* in the Lazarev Sea, Antarctica	*A.S. Diekmann:* Significance of Algal Bloom Temporal Dynamics on Zooplankton Vital Rates – Variation in diatom biochemical composition during a simulated bloom and its effect on copepod reproduction	*N. Valdivia:* Function of the habitat-forming seaweed Fucus serratus on temporal stability in diversity of macrobenthic communities from Helgoland rocky shores
14:45	*V. Spiridonov:* Indicators of climate change impact on the White Sea ecosystem	*A. Kraberg:* Heterotrophic Dinoflagellate Biodiversity and Ecology at the Helgoland Roads long-term monitoring station in relation to changing Prey availability	*S. Domisch:* Effects of *Sargassum muticum* on structure and diversity of macrobenthic rocky shore communities at Helgoland
15:00	*Y. Kamenir:* Global change and consistent size-structure patterns of the phytoplankton assemblage	*A.M. Malzahn:* Differential effects of nutrient-limited primary production on larval fish and hydromedusae condition	*A. Rubach:* Habitat modification by a canopy forming seaweed affects resource versus consumer control in a coastal benthic food web
15:15	*E. Rothäusler:* Increasing seawater temperatures limit dispersal distances of kelp rafts	*L.M. Noel:* Species interaction during succession: Role of herbivores and physical factors	*M.G. Matias:* Linking functional diversity and non-random distribution of species to ecosystem functioning
	15:30 – 16:00 *Coffee Break*		
16:00 – 17:00	**Global Change** **Chair: *Gisela Lannig***	**Trophic Interactions** **Chair: *Arne Malzahn***	**Biodiversity** **Chair: *Karsten Reise***
16:00	**Keynote lecture**	*K. Norderhaug:* Variations in kelp forest secondary production with exposure	*G.M. Martins:* Population and community level effects of exploitation of rocky intertidal grazers
16:15	*U. Riebesell:* **Ocean acidification: curse or blessing?**	*M. Peck:* Larval fish and their food at fronts: Combining in situ measurements and individual-based modelling to understand trophic interactions in the German Bight (southern North Sea).	*P. Range:* The effects of changing diversity of species on temporal variability: an experimental test with intertidal assemblages of grazing gastropods and epilithic algae.
16:30	*J. Barcelos e Ramos:* Effect of rising atmospheric carbon dioxide on the marine nitrogen fixer *Trichodesmium*	*S. Schueckel:* Trophic interactions between benthic communities and demersal fish in the northern North Sea	*S. Rakers:* Temporal variability of epibenthic communities in the extended German Bight
16:45	*M. Lunau:* Investigating the effects of changes in CO2 concentration on marine plankton dynamics with chemostat systems	*A.C. Silva:* Effects of mobile aquatic predators in the intertidal	*J.O. Schmidt:* Dramatic increase of larval snake pipefish (*Entelurus aequoreus* L.) off North Scotland - a result of climate change

17:00 – 19:00
Poster Session I

- **IR - Effects of Climate Change on Marine Ecosystems**
- **Invasion**
- **Topics outside the main themes**

Wednesday, August 29
Excursions to Lübeck and Multimar (Tönning)

8:30	**Departure of the bus in front of the congress building**
17:00	**Yellow Submarine Contest (Halle 400, see map)**
19:30	**Conference Dinner (Halle 400, see map)**

Inter-Research Symposium # 2

"Effects of Climate Change on Marine Ecosystems"

27–31 August 2007, Kiel, Germany

Papers presented at the Inter-Research Symposium on "Effects of Climate Change on Marine Ecosystems" at the EMBS in Kiel can be published in a special issue of the IR journal ***Climate Research*** **(CR): www.int-res.com/journals/cr/cr-home/**.

Tentative publication date is early in 2008. This Climate Special will have free Open Access (see **www.int-res.com/journals/open-access**), and several hundred hard copies will be distributed with the compliments of IR (including 1 copy for each contributor). This will ensure high visibility and unprecedented free access to the articles.

All articles will undergo peer review; only those of highest quality will be accepted. There will be no page limit on this CR Special, i.e. all acceptable articles will be published. Manuscripts should be prepared following the technical guidelines of CR (see **www.int-res.com/journals/cr/guidelines-for-cr-authors/**), and should be submitted by email to **cr-submissions@int-res.com**. The cover letter must specify that the manuscript is being submitted for inclusion in the CR Special on Effects of Climate Change on Marine Ecosystems.

Thursday, August 30

	Hall I: **IR-Symposium # 2: Effects of Climate Change on Marine Ecosystems** **Global Change** **Chair: *Mathieu Cusson***	**Hall II:** **Complex Interactions** **Interaction Webs** **Chair: *Gulio Relini***	**Hall III:** **"Invasion, Biodiversity, Topics outside the main themes"** **Ecosystem Consequences of Biodiversity Change** **Chair: *Joao Canning-Clode***
9:00	*F. Sommer:* Effect of global warming on top-down control of a Baltic Sea plankton community	**Keynote lecture** *S.J. Hawkins:* **Complex interactions in a rapidly changing world: integrating long-term observations with experimental approaches and modelling to forecast the impacts of global change on the functioning of coastal and nearshore ecosystems**	*R. Scrosati:* Spatial trends in community diversity across rocky intertidal environmental gradients in Atlantic Canada
9:15	*J. Woolven-Allen:* Bacterioplankton community structure in a high CO_2 world		*H.M. Tillin:* Will degradation of benthic habitats lead to loss of ecosystem function?
9:30	*V. Martin-Jézéquel:* Phytoplanktonic taxa-specific changes in the CO_2-rich world	*H. Auel:* Hypoxia tolerance in the copepod *Calanoides carinatus* and the effect of the intermediate oxygen minimum layer on pelagic community structure in the northern Benguela upwelling system	*M. Soffker:* Cold-water coral reefs as fish habitat. Comparison of a trawled and non-trawled site in the Northeast Atlantic.
9:45	*D. Lowe:* The impact of CO_2 acidification on reproduction and feeding in sediment dwelling echinoderms.	*S. Jansen:* Reproduction and development of the copepods *Rhincalanus gigas*, *Calanus simillimus* and *Pleuromamma robusta* during an iron induced phytoplankton bloom (EIFEX) in the Southern Ocean	*K. Burke:* The effect of fish farming on biodiversity and ecosystem function: in situ pulse chase experiments and analysis of stable isotope ratios.
10:00	**Keynote lecture** *Y. Shirayama:*	*U. Helminen:* Coastal phytoplankton communities in the Baltic Sea	*S. Vöge:* Macrofauna succession in an infilling salt marsh clay pit
10:15	**Potential impacts on benthic ecosystem in the future high CO2 world**		*P. Patabendi:* Sea as a dumping ground - A case study of Sri Lanka as a small island
	10:30 – 11:00 *Coffee Break*		

	Global Change **Chair: *Mathieu Cusson***	**Interaction Webs** **Chair: *Thomas Brey***	**Biodiversity** **Chair: *Sergey Dobretsov***
11:00	**Keynote lecture** *J.A. Kleypas:* **Effects of increasing atmospheric CO_2 on coral reef ecosystems: ocean warming and ocean acidification**	*P. Kanstinger:* Habitat partitioning and physiological condition of ichthyoplankton in nearshore and offshore areas of the southern North Sea	*T.L. Costa:* Detecting anthropogenic disturbances in the rocky intertidal: A study of rocky shores in Victoria, Australia
11:15		*C. Kruschel:* Association of fish and invertebrates with shallow benthic habitats (seagrass, algae, unvegetated) revealed by DGPS/video-tracking dive transects	*E.M. Marzinelli:* Human modification of habitat and its effect on kelp epifauna
11:30	*A. Beesley:* Impact of CO_2 acidification on the health of the marine mussel *Mytilus edulis*	*T. Pedersen:* Trophic interactions of cod (*Gadus morhua*) and other fish species in a changing coastal food-web	*E. Strain:* Ecosystems effects of fishing blacklip abalone Haliotis rubra in Tasmania, Australia
11:45	*M. Gutowska:* Differing sensitivities to elevated carbon dioxide in marine molluscs	*O. Vesakoski:* Top-down and bottom-up forces in adapting to local host plant assemblages in marine herbivore *Idotea baltica*	*O. Paramor:* The effect of fishing on habitat functioning: Implications for management
12:00	*H.L. Wood:* Quantifying the physiological effects of ocean acidification on *Amphiura filiformis*	*K. Norling:* Impact of single- and multi-species treatment on ecosystem functions in Baltic Sea sediments	*R. Hermand:* differences in response of a mediterranean benthic community submitted to natural and anthropic high sedimentation
12:15	*C.L. McNeill:* The impact of seawater acidification on the diversity and structure of benthic macrofaunal communities.	*M. Varfolomeeva:* Substrate choice by ascidian larvae does not explain the distribution of adults	*I. Cacador:* Twenty years of vegetation dynamics in salt marshes of the Tagus Estuary (Portugal)
	12:30 – 14:00 *Lunch Break*		
14:00 – 16:00	**Global Change** **Chair: *Mytron Peck***	**Interaction Webs** **Chair: *Gerardo Zardi***	**Biodiversity** **Chair: *Heye Rumohr***
14:00	**Keynote lecture** *L. Fortier:* **From microbes to Polar bears: the Arctic marine ecosystem on the line of fire**	*E. Bonsdorff:* Scale-dependent distribution of soft-bottom infauna in relation to habitat quality	*H. Hampel:* Climate change research in FP7

14:15	**Keynote lecture** *L. Fortier:* **From microbes to Polar bears: the Arctic marine ecosystem on the line of fire**	*M. Wahl:* Epibiosis: Complex defenses – multiple stressors	*J. Dippner:* BALTEX Assessment of Climate Change for the Baltic Sea basin: climate related marine ecosystem change
14:30	*I. Werner:* Not only the bear will disappear - potential impacts of climate change on Arctic pack-ice communities	*N. Volkenborn:* Complexity of ecosystem engineering in the marine benthos	*H. Korehi:* Effect of Environmental Changes on Abundance of Cyanobacteria in Tiab Estuary, Persian Gulf
14:45	*M. Kedra:* Climate-driven change in the biodiversity soft bottom macrobenthos - Arctic case study (Kongsfjorden, Spitsbergen)	*B. Burkhard:* Impacts of future offshore winds farms on marine biota in the German North Sea – an ecosystem model based approach	*J. Griffin:* Primary succession, biodiversity and ecosystem functioning in rock pools
15:00	*M. Bergmann:* First benthic time-series data from a long-term observatory at high latitude: 'HAUSGARTEN' (79°N, west off Svalbard)	*A. Barausse:* Northern Adriatic sea mass-balance model: trophic structure of a highly-fished and eutrophic ecosystem	*L. Robinson:* Do species identities and biodiversity matter in terms of productivity or is size all that matters?
15:15	*E. Bauerfeind:* Variability of vertical particle flux at the AWI long-term observatory (Hausgarten) 79 °N, 4° E during 2000-2005	*K. Lindström:* The effect of anthropogenic environmental change on fish mating systems	*C. Bradshaw:* Ecosystem effects of a flame retardant in a shallow Baltic Sea environment
		15:30 – 16:00 *Coffee Break*	
16:00 - 17:00	**Global Change** **Chair: *Iris Werner***	**Chemical interactions** **Chair: *Florian Weinberger***	**Biodiversity** **Chair: *NN***
16:00	*A. Wulff:* Antarctic benthic marine diatoms in a changing light climate	**Keynote lecture**	*C. Hiebenthal:* From the past to the future: what bivalves hide in their shells
16:15	*S. Kaiser:* Antarctic deep-sea biodiversity, scale and predicting responses to climate change	*M. Hay:* **Signals in the sea: chemical signals mediate complex interactions at levels of populations, communities, and ecosystems**	*H. Hummel:* The impact of biodiversity changes in key species on structure and function of coastal marine benthic communities– an overview of the BIOCOMBE project
16:30	*V. Spiridonov:* Which factors determine distribution of sublittoral benthos in a subarctic sea?	*H. Yun:* Specificity of induced resistance in *Fucus vesiculosus*: causes and consequences by *Idotea* and *Littorina* from different habitats	*S.T. Schultz:* Seagrass monitoring by underwater videography: disturbance regimes, sampling design, and statisical
16:45		*S. Rohde:* Defensive reactions of *Fucus vesiculosus* – Today, tomorrow or next week?	*A. Ehlers:* Eelgrass meadows in a changing world – genotypes get in on coping with change

Thursday, August 31
17:00 – 19:00 Poster session II

- **Trophic interactions**
- **Interaction webs**
- **Chemical interactions**
- **Ecosystem consequences of biodiversity change**

Friday, August 31

	Hall I: **IR-Symposium # 2: Effects of Climate Change on Marine Ecosystems** **Global Change** **Chair: *Tsutsumi***	**Hall II:** **"Complex Interactions"** **Chemical Interactions** **Chair: *Mark Hay***	**Hall III:** **"Invasion, Biodiversity, Topics outside the main themes"** **Topics Outside the Main Themes** **Chair: *Arne Malzahn***
9:00	*T. Brey:* Climate forcing of growth in the bivalve *Eurhomalea exalbida* from the Beagle Channel, Tierra del Fuego	*F. Weinberger:* Blue-light-activated diurnal defense in *Fucus vesiculosus*	*J. Jelbart:* Monitoring for potential impacts of pearl oyster aquaculture on marine benthos
9:15	*N.A. Kamenos:* Climatic influences on NE Atlantic crab (*Cancer pagurus*) and lobster (*Homarus gammarus*) fisheries	*S. Dobretsov:* Algal waterborne metabolites determine formation of benthic communities	*A.T. Correia:* Natural chemical tags as complimentary tools to identify the European conger eel (*Conger conger*) spawning stock(s)
9:30	*I. Kröncke:* Long-term studies off the island of Norderney and climate variability	*G.M. Nylund:* Antimicrobial defence in the red alga *Bonnemaisonia hamifera*	*H. Voigt:* Concentrations of heavy metals, in sediment and biota, from coastal waters, at Tvärminne, Finnish western Gulf of Finland
9:45	*N. Mieszkowska:* Thermal responses of four species of the *Mytilus* genus of mussel exposed to acute heatwave events occurring as the result of global climate change.	*G. Pohnert::* Differential regulation of lipase activities to trigger oxylipin-mediated defence in the red alga *Gracilaria chilensis*	*M. Nedzi:* Toxicity assessment of imidazolium Ionic Liquids to the Baltic microalgae.

10:00	*N. Wernberg:* The effect of ocean climate on resilience of kelp beds to physical disturbances	*T. Lachnit:* Control of Epibacterial Communities on Macroalgae by Algal Metabolites	*S. Ravichandran:* Influence of Tsunami on Crab Diversity in Pichavaram Mangrove Environment, Southeast Coast of India
10:15	*H. Neumann:* Temporal variability in epibenthic communities from the German Bight towards the Norwegian Sea	*I. Peeken:* Carbon monoxide and non-methane hydrocarbons emissions by phytoplankton: preliminary results from laboratory and field experiments	
11:00	*M. Frost:* Large-scale analysis of European biodiversity data to detect temporal effects and common trends	*R. Koivikko:* How to assess the contents of phlorotannins - Folin-method versus HPLC	
11:15		*U. Bickmeyer:* Measurement of stimulus correlated fluorescence signals in intact palaemonid shrimps following chemical stimulation with the secondary metabolite 2,4-dibromophenol	
11:30 – 12:00 ***Poster Breakdown and Coffee Break***			
12:00	***Closing session (Hall 1)*** *F. Wallenstein:* Nine years later - 43 EMBS in the Azores: themes, dates and deadlines MARS AWARD		
13:00 – 14:00 ***Lunch***			


EUROPEAN
EMBS
MARINE BIOLOGY
SYMPOSIUM
42
kiel | 27-31 august 2007

Cluster of Excellence
'The Future Ocean'

the future ocean
CHANGES, RESOURCES AND RISKS

The ocean is extensively used and altered by mankind, causing a multitude of changes that can already be observed, with unforeseen consequences for the future.

To examine these changes and assess the risks and opportunities that will develop, a large group of scientists at the University of Kiel including marine researchers, geologists, medical scientists, economists, mathematicians, chemists, legal experts and social scientists has joined forces.

Scientists in the Excellence Cluster study the scientific basis for ocean change, assess ocean management options and develop our capacity to predict risks and sustainably exploit marine resources.

The Excellence Cluster "The Future Ocean" is funded through the Excellence Initiative of the German Research Foundation (DFG) for an initial period of 5 years (2006 – 2011).

www.future-ocean.de

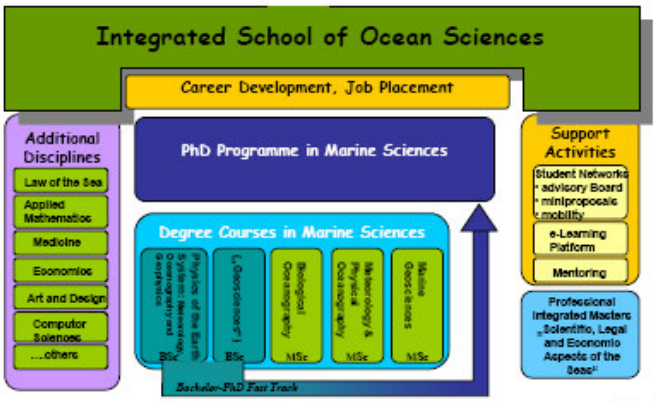
The Integrated School of Ocean Sciences (ISOS)

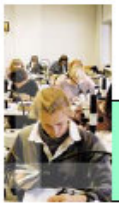
Research and Education for „The Future Ocean"

Marine research and teaching have a long history of excellence in Kiel. Reflecting the strongly multidisciplinary approach in the Cluster, the ISOS has been established to exploit synergies in research and teaching at the graduate level thus supporting the emerging science and creating a strong profile for young researchers within the Cluster.

ISOS aims to

- establish a multi-disciplinary ocean education program for **graduate students,**
- exploit synergies between research and teaching through **joint courses**, multidisciplinary **lecture series** and summer schools
- carry the marine focus of the CAU to the **public** and **industry** through, e.g. **expert lecture series**





Contact: isos@uv.uni-kiel.de

August 28 17:00 –19:00	**Poster Session I** • ***IR* - Effects of Climate Change on Marine Ecosystems** • ***Invasion*** • ***Topics outside the main themes***

***IR* - Effects of Climate Change on Marine Ecosystems**	
1	*Rosalia Ferreri* Implications of climate change on spawning strategies of European anchovy in the Strait Sicily
2	*Katharina Bremer* Thermal acclimation of aerobic scope in a southern North Sea cod population
3	*Brian R. MacKenzie* The Danish fish fauna during the warm Atlantic period (ca. 7,000-3,900 BC): forerunner of future changes?
4	*Jakov Dulčić* The effect of hemispheric climatic oscillations on the Adriatic ichthyofauna
5	*Sandra Goebel* Effects of long term, sub – lethal hypercapnia on swimming performance and key enzyme capacities in the teleost *Gadus morhua*
6	*John Gordon* Biodiversity and Abundance of deep demersal fishes of the Porcupine Seabight, NE Atlantic Ocean. 1978 to 2002, evidence of depletion by a fishery down to 2500m depth.
7	*Celine Leichner* The influence of environmental variability on a crustacean fishery in Nova Scotia, Canada
8	*Sanja Matic-Skoko* The northward movement of termophilic fish species in the Adriatic Sea
9	*Norma Sánchez* The influence of solar activity over the environmental variability and the capture of Rhizoprinodon dogfish in the Gulf of mexico
10	*Monika Weiß* Environmental and maternal effects on the early life stages of the edible crab *Cancer pagurus*
11	*Catarina Vinagre* Impact of climate and hydrodynamics changes in sole larval immigration towards the Tagus estuary (Portugal)
12	*Salma Begum* Towards the calibration of an environmental bio-recorder
13	*Claas Hiebenthal* Ca Isotope Fractionation (δ44/40Ca) in Bivalve Shells as a Proxy for past Climate Changes
14	*Gloria Massamba N'Siala* Phenotypic adaptation of the model polychaete Ophryotrocha labronica to different climatic conditions

15	Brita Sundelin Anthropogenic/hypoxia stress-a battery of biomarkers and bioindicators for marine environmental testing
16	*Ali Nasrolahi* Effect of sea level changes on coast of Persian Gulf from biological perspective
17	*Md. Khurshid Alam* Radioisotopes Concentration in Offshore Sediment and Water of the Bay of Bengal
18	*Alexandra Haselmair* Dead zones: a future coastal scenario for climate change
19	*Anna Fricke* Effects of UV radiation on the succession of benthic communities in Spitsbergen
20	*Monika Fijalkowska* Response of the cyanobacterium *Microcystis aeruginosa* to ultraviolet (UV-B) irradiation
21	*Frauke Pescheck* Screening of UV-A and UV-B radiation in marine green macroalgae
22	*Iris Werner* Impact of UV radiation on Arctic under-ice amphipods
23	*Katrin Deigweiher* Adaptation of ion regulatory capacities in fish gills under hypercapnic acidosis
24	*Armin Form* Cold-water corals – Precious ecosystems at high risk
25	*Isabelle Taubner* Ocean acidification affects calcification in reef-building corals
26	*Helen Findlay* Synergistic impacts of elevated CO_2 (lowered pH) and temperature on larvae of major rocky shore space occupiers
27	*Marius Müller* Coccolithophorid adaptation to rising atmospheric CO_2: a running long-term experiment
28	*Magdalena Gutowska* Embryonic and hatchling development in *Sepia officinalis* under moderate hypercapnia
29	*Sebastian Krug* Impact of CO_2-induced seawater acidification on the calcification of the coccolithophore *Coccolithus pelagicus*
30	*Edyta Guzera* The space and seasonal variabilty of small Calanoida from Pseudocalanidae family in the Admiralty Bay (King George Island).
31	*Monika Kedra* Environmentally controlled distribution of sipunculan fauna in arctic glacial fiords
32	*Eduard Bauerfeind* Monitoring of chlorophyll from satellite and in-situ measurements since the nineties in the Fram Strait and Greenland Sea (Arctic Ocean)

33	*Astrid Wittmann* Life in cold oceans: activity dependent on extracellular ion regulation?
34	*Ellen Weihe* Hypoxic and desiccation stress response in intertidal and subtidal Antarctic limpets
35	*Leonardo Cannizzaro* Strange catch of *Melicerctus kerathurus* (Forskal, 1775) in the Selinunte's shallow costal waters
36	*Gianluca Sarà* Correlation between jellyfish stings and temperature data in Mediterranean: evidence from a historical dataset from 1980 to 2006
37	*Gianluca Sarà* Environmental dryness and food availability covariate and determine the bivalve distribution in the Mediterranean Sea: a Tyrrhenian case study
38	*Alexandra Temnykh* Some aspects of climatic variability on the formation of zooplankton accumulations in the Black Sea
39	*Yuriy Tokarev* The Influence of Climate on the Long-Period Changeability of the Black Sea Bioluminescence Field and the Pelagial Background Characteristics
40	*Jeanette Göbel* Phytoplankton species diversity in the coastal waters of the North Sea as possible response to climate change.
41	*Elmira Boikova* Diversity of macrophytobenthos in the Gulf of Riga, Baltic Sea, Latvia
42	*Susanne Wilken* Impact of iron availability on diatom valve structure and stability
43	*Marcus Reckermann* BALTEX: An interdisciplinary environmental research network for the Baltic Sea basin
Invasion	
45	*Fredrik Gröndahl* The removal of surface blooms of the Cyanobacteria Nodularia spumigena
46	*Nicole Brennholt* "Green sands": a new phenomenon in the Wadden Sea caused by the microbenthic algae *Euglena viridis* var. maritima
47	*Hrvoje Ćižmek* First record of the invasive turf-forming red algae *Womersleyella setacea* (Hollenberg) R.E. Norris in the Middle Adriatic
48	*Stefano Corrias* Findings of the green algae *Penicillus capitatus* Lamarck, in South Sardinia (Western Mediterranean)
49	*Yun Hee Young* Comparison of defensive responses by an indigenous and an introduced red alga from intertidal Helgoland shores
50	*Georg Nehls* *Gracilaria vermiculophylla* (Gracilariales, Rhodophyta) spreading on tidal flats of the Wadden Sea

51	*Inger Wallentinus* Macroalgae climb the progressive steps of invasion differently
52	*Thomas Wernberg* The effects of ocean climate, physical disturbance and nutrient enrichment on the ecological performance of *Caulerpa* spp. from Western Australia
53	*Mads Thomsen* Invasion by *Gracilaria vermiculophylla* in Scandinavia -what to expect in the future
54	*Mads Thomsen* Benthic Marine Non-Indigenous Species in Denmark - are they increasing in abundance?
55	*Erik Mielke* *Mnemiopsis leidyi* and its possible foodweb effects in the Schlei estuary
56	*Dirk Sarpe* Reproduction efficiency of *Mnemiopsis leidyi* in its new exotic habitat, the South-west Baltic Sea
57	*Tobias Großkopf* Effect of temperature on respiration rates of *Mnemiopsis leidy*
58	*Larisa Litvinchuk* Invading species in the Gulf of Finland and in the Baltic Proper (2004-2006): distribution and effects on zooplankton community
59	*Ann-Kristin Eriksson Wiklund* competition and contaminants - is the invasive species *marenzelleria* spp a threat to the native species *monoporeia affinis* in the Baltic?
60	*Alexey Maximov* Long-term variations in macrozoobenthos of the eastern Gulf of Finland in relation to eutrophication, hydrographic changes and biological invasions
61	*Persefoni Megalofonou* On the occurrence of the lessepsian emigrant *Lagocephalus Suezensis* in the Aegean Sea (Greece)
62	*Persefoni Megalofonou* New records of the sharpnose seven-gill shark, *Heptranchias perlo*, in the eastern Mediterranean Sea (Aegean Sea, Greece)
63	*Ronaldo Sousa* Spatial and temporal distribution of the invasive Asian clam *Corbicula fluminea* (Müller, 1774) in the Lima estuary, Portugal
64	*Inken Kruse* Genetic proof for the source of an introduction: the parasitic barnacle *Loxothylacus panopaei* came from the Gulf of Mexico
65	*Annika Weseloh* Community age and functional identity determine the stability of fouling communities in two regions of the Western Pacific
66	*Graeme Clark* Temporal scale: the missing agent in the invasion paradox
Topics outside the main themes	
67	*Fatemeh Abbassi* The changes in plasma cortisol levels and body composition in

	Stizostedion lucioperca exposed to handling stress
68	*Mohammad Reza Ahmadi* The Natural Environment of the Shadegan Wetland in the Persian Gulf
69	*Mohammad Reza Ahmadi* Biological Aspects of Sea Turtles in Hormoz and Henqam island in the Persian Gulf
70	*Armando Ortega-Salas* Culture of the white shrimp in freshwaters tanks
71	*Birgit Lessmann* Use of automated image analysis to detect changes in megafaunal densities at HAUSGARTEN (79N west off Svalbard) between 2002 and 2004
72	*Tasman Crowe* Pollution as a driver of biodiversity change: impacts, indicators and long term monitoring
73	*Shahla Jamili* histological survey of effect of thyroxine on growth and development of larvae and egg of *Oncorhychus mykiss*
74	*Mahdieh Malek-hoseini* Histological examination of sublethal concentrations effects of diazinon ovary of *Chalcalburnus chalcoides*

August 30 17:00 – 19:00	**Poster session II** • **Trophic interactions** • **Interaction webs** • **Chemical interactions** • **Ecosystem consequences of biodiversity change**
	Trophic interactions
76	*Petra Brandt* The bacterial community of marine copepods
77	*Christina Gebühr* *Paralia sulcata*: new insights into an ancient diatoms life cycle and its ecological role
78	*Britta Knefelkamp* Picophytoplankton off Helgoland
79	*Martin Löder* Micro- versus mesozooplankton grazing: the contribution of ciliates, dinoflagellates and copepods in controlling phytoplankton biomass
80	*Jurate Lesutiene* Mysid *Paramysis lacustris* in the food web of Curonian lagoon (SE Baltic Sea)
81	*Arno Põllumäe* Factors affecting mesozooplankton long-term changes in Gulf of Finland (Baltic Sea)
82	*Ulrich Bathmann* Feeding and respiration patterns of major copepod species in the Lazarev Sea (Antarctica) during winter

83	*Katherina Schoo* The effect of nutrient limitation on primary producers and the propagation of these limitation signals onto higher trophic levels
84	*Karen Stumm* The structure of benthic microbial communities of shallow soft sediment habitats
85	*Yuta Tamberg* Size of consumed diatom algae indicates feeding segregation in symbiotic suspension-feeders: preliminary results
86	*Florian Hantzsche* The role of ciliates in the marine pelagic- ciliates as top predators within the microbial loop and as important link to secondary producers
87	*Anja Fitter* The role of the microbial loop in benthic communities - combining food web theory and ecological stoichiometry
88	*Katja Guilini* The response of arctic marine nematode communities to simulated food falls
89	*Kristina Boeckh* Using Birds and Marine Mammals as Indicators to Access the Impacts of Offshore Wind Parks in Germany- A Spatio-Temporal Scenario Approach
90	*Eduard Bauerfeind* δ15 N content in sedimenting particles in the seasonally ice-covered Greenland Sea
91	*Melanie Bergmann* Trophic relationships between demersal fish and benthic fauna at ‘HAUSGARTEN` (79°N west off Svalbard)
92	*Vassily Spiridonov* Reddish sand shrimp *Crangon allmanni*: predatory habit in high energy environment
93	*Gitta Jäckel* Analysis of diurnal activity patterns and related changes in metabolism in the cephalopod *Sepia officinalis*
94	*Veijo Jormalainen* Selective mosaic and ecological divergence in host use ability of a marine generalist herbivore
95	*Philipp Krämer* "Eat what's on your plate!": Feeding of fishes in different habitats
96	*Donat Petricioli* Uncommon behaviour of some benthic animals below tuna farms in the Adriatic – a response to organic enrichment
97	*Giulio Relini* Fin Fish of Artificial Reefs in the Gulf of Genoa (North Western Mediterranean Sea)
98	*Ilona Zloch* The changes of prey items in the diet of juvenile flounder from the Gulf of Gdansk during last 50 years

99	*Clara F. Rodrigues* Phylogenetic characterization of chemoautotrophic symbiont bacteria in bivalve species from mud volcanoes in the Gulf of Cadiz (southern Iberian margin)
100	*Ermelinda Prato* A multitrophic battery of tests for marine environment toxicity assessment
Interaction webs	
101	*Gianluca Sará* Using limpets (*Patella coerulea*) in monitoring PAHs levels along Sicilian coasts
102	*Gianluca Sarà* Effect of dispersion of food source on behaviour of damselfish (*Chromis chromis*)
103	*Maria Paches* Near Field phytoplankton effects in Valencia fish cages
104	*Maria Paches* Phytoplankton Population Changes Along the Saline Gradient of Albufera Plume
105	*Sandra Jansen* Fate of copepod faecal pellets during an iron induced phytoplankton bloom (EIFEX) in the Southern Ocean
106	*Sten-Åke Wängberg* Effects of UV-B radiation on interactions within the microbial community in an arctic bay
107	*Alexandr Gornykh* Interactions between *Mytilus edulis* and intertidal soft-bottom macrobenthos in the White Sea
108	*Alexandra Haselmair* Oxygen crises and disrupted benthic macrofauna interactions: crustaceans as a case study
109	*Pia Norling* *Mytilus* and red-algae interactions with implication for diversity of associated macrofauna in the Baltic Sea
110	*Majid Sampour* The study of male reproductive ducts of *Haploporus lateralis* (Digenea:Trematoda)
111	*Nils Volkenborn* Complexity of ecosystem engineering in the marine benthos
112	*Meri Lindqvist* Lost in a selective mosaic? Effects of population genetic structure and gene flow on marine host-herbivore interactions in the Baltic Sea

Chemical interactions	
113	*Svetlana Chikadze* Lectin-carbohydrate interactions in settlement of hydroid planulae *Dynamena pumila* and *Gonothyraea loveni*
114	*Alexander Railkin* Chemical communications between benthic communities
115	*Sergey Dobretsov* Are larvae of the blue mussel *Mytilus edulis* redistributing after settlement?
116	*Esther Rickert* Oligoalginate-induced innate immunity in *Saccharina latissima* from the Baltic Sea
117	*Cordula Scherer* Inhibition of multidrug resistance transporters in the diatom *Thalassiosira rotula* facilitates dye staining
118	*Samir Radwan* Hydrocarbon-utilizing bacteria associated with fish from the Arabian Gulf
Ecosystem consequences of biodiversity change	
119	*Ana da Silva* Giant protozoan (*Xenophyophores*) from the Nazarı Canyon
120	*Petra Deegen* Different nutrient conditions affect community structure of benthic diatoms
121	*Rita Domingues* Seasonal and interannual variability of phytoplankton and nutrients in the Guadiana estuary: before and after dam construction
122	*Christopher Cesar* The impact of commercial cockle (*Cerastoderma edule*) harvesting on ecosystem function
123	*Gillian Andrew* The influence of biodiversity on resource partitioning in intertidal gastropods
124	*Sebastian Valanko* Scale-dependent disturbance and recovery of soft-sediment communities - the role of benthic invertebrate mobility
125	*Mohammad Haseli* Biodiversity of Tetraphyllidean cestodes of the shark, *Carcharhinus dussumieri* from the Persian Gulf, Iran
126	*Pedro Luis Ardisson* Trends in spatial benthic species diversity variability in the southern Gulf of Mexico: a threatened sea ecosystem
127	*Constanze Gehling* *Fucus vesiculosus* in the Mecklenburg Bight - physiological potential for settlement
128	*Diane Jones* The Role of Species Identities in Marine Benthic Ecological Functioning
129	*Mark Lenz* Testing concepts in ecology: the international research programme GAME allows the global replication of experiments in marine coastal ecosystems.
130	*Frithjof Moy*

	Sugar kelp status in Skagerrak
131	*Renata Pilkaitytë* Nitrogenase activity in the shallow eutrophic lagoon: two year case study
132	*Henning Reiss* Effects of trawling on benthic diversity and community structure: a micro-scale comparison
133	*Karen Stumm* Estimating Archaeal Biodiversity in the deep: a comparison of different T-RFLP protocols
134	*Robin Svensson* Maximum species richness at intermediate frequencies of disturbance: consistency among levels of productivity
135	*João Canning-Clode* Regional vs. local diversity during the succession process in hard-bottom communities
136	*Nelson Valdivia* Functional biodiversity and ecosystem performance: separating the effects of species richness, community composition, and density