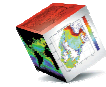




## AMEMR 2008

## Oral Sessions



### Monday 23 June

9:00			Introduction and housekeeping
			<b>Session 1: The Challenges of Change</b>
9:10	582	<b>Andreas Oschlies</b>	<b>Keynote 1: Climate change and impacts: decades to centuries</b>
9:40	637	Taketo Hashioka	Predicted impacts of global warming on marine ecosystem with a 3-D high-resolution ecosystem model
10:00	635	Thomas M. Powell	Downscaling Global Climate to the Circulation and Pelagic Ecology in the Northeast Pacific Ocean
10:20	644	Jason Holt	The sensitivity of the circulation, stratification and primary production of the Northwest European continental shelf to climate change
10:40			<b>Coffee</b>
11:10	536	Steven Mackinson	Exploring the relative influence of climate and fishing on the dynamics of fish populations in marine ecosystems.
11:30	558	Baris Salihoglu	A coupled plankton-anchovy population dynamics model assessing nonlinear controls of anchovy stock and anchovy-gelatinous shift in the Black Sea
11:50	597	Marilaure Gregoire	Understanding the Black Sea ecosystem functioning during the eutrophication phase using mathematical modelling.
12:10	622	Christiane Lancelot	Coupling the RIVERSTRALER model to the 3D-MIRO&CO model to assess the present-day and future evolution of coastal eutrophication in the eastern Channel and Southern North Sea.
12:30	638	Hywel Williams	An adaptive ecosystem model of marine biogeochemistry during the Archaean period
12:50			<b>Lunch &amp; poster session 1</b>
14:15	661	<b>Jerry Blackford</b>	<b>Keynote 2: The challenges of modelling ecosystem response to ocean acidification.</b>
			<b>Session 2: Model evaluation and skill assessment</b>
14:45	532	Bablu Sinha	Skill assessment of a complex ocean ecosystem model : sensitivity to ocean physics and biogeochemical parameterisations
15:05	543	Marcello Vichi	Biogeographic validation of a global ocean biogeochemistry model
15:25	650	Daniel Lynch	Skill Assessment for Coupled Biological/Physical Models of Marine Systems
15:45			<b>Tea</b>
16:15	611	Ben Ward	Constraining complexity: Ecosystem model comparison and analysis
16:35	633	Marjorie Friedrichs	Assessing the skill of regional marine ecosystem models characterized by varying levels of complexity
16:55	640	Charles Stock	Developing an Ecosystem Model for Global Application: Sensitivity and Calibration to Global Trends in Phytoplankton, Bacteria, and Mesozooplankton
17:15	571	Eileen Hofmann	Eastern U.S. Continental Shelf Carbon Budget: Integrating Models, Data Assimilation, and Analysis
17:35			<b>End</b>

## Tuesday 24 June

### Session 3: Data, assimilation and operational models

9:00	666	Nick Hardman-Mountford	An objective methodology for the classification of ecological pattern into biomes and provinces for the pelagic ocean
9:20	574	Rosa Barciela-Fernandez	Impact of physical and biological data assimilation on the global surface air-sea fluxes of CO <sub>2</sub>
9:40	589	Geneviève Lacroix	Interannual variability of the spring bloom timing in the Southern North Sea investigated by MIRO&CO-3D and remote sensing
10:00	654	Alessandro Crise	A coupled model for the short-term forecast of the Mediterranean biogeochemistry
10:20	525	Cédric Penard	Real time modelling of coupled physical-biogeochemical processes in the French Brittany coastal zone. Effect of nutrient enrichment.

### 10:40 Coffee

### Session 4: The Human dimension: Environmental interactions & management

11:10		<b>Christian Mullion</b>	<b>Keynote 3: A global bio economic approach of small pelagic fisheries.</b>
11:40	708	Gorka Merino	Modelling climate change effects on a global marine commodity using game theory
12:00	580	Karen Wild-Allen	Quantifying the environmental impact of salmon farms: observations, model and monitoring program evaluation.
12:20	533	Eric Grist	Spatial Management of Marine systems: Using an Ecosystem Model to Evaluate Integrated Performance Measures

### 12:40 Lunch & poster session 2.

14:00	655	David Mills	Predicting the consequences of nutrient reduction on the eutrophication status of the North Sea
14:20	544	George Triantafyllou	Biophysical Modeling as an environmental management tool: The case of Pagasitikos Gulf, Greece.

### Session 5: Embracing Biodiversity

14:40		<b>Matthijs Vos</b>	<b>Keynote 4: Novel modelling approaches to relate biodiversity of marine sediments to ecosystem functioning</b>
15:10	709	Paul Somerfield	Biodiversity, ecosystem functioning and ecosystem models
15:30	615	Jorn Bruggeman	Biodiversity in ecosystem models: an adapting model manoeuvring between autotrophy and heterotrophy in global setting

### 15:50 Tea

16:20	646	Karl Ugland	Some aspects of marine ecosystem modelling
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### Session 6: How complex is a complex model?

16:40		<b>Mike St John</b>	<b>Keynote 5: Complexity, Foodweb Theory, and Marine Ecosystem Modelling</b>
17:10	659	Thomas Anderson	Progress in marine ecosystem modelling and the “unreasonable effectiveness of mathematics”

### 17:30 End & Poster reception

## Wednesday 25 June

### Session 6: How complex is a complex model?, continued.

9:00		<b>Mick Follows</b>	<b>Keynote 6: Modelling Emergent Biogeography</b>
9:30	594	Agostino Merico	Downscaling complexity in plankton ecosystem modelling
9:50	628	Carole Lebreton	Coupling a dynamical model to a flow network, a new ecosystem modelling approach
10:10	608	Hans Los	Complexity, accuracy and practical applicability of different model applications

### 10:30 Coffee

11:00	625	Inga Hense	A missing aspect in ecosystem and biogeochemical models - the organism's life history
11:20	590	Karline Soetaert	Unravelling deep-sea food benthic webs, using a combination of linear inverse and dynamic compartment modelling.
11:40	675	Icarus Allen	Development of next generation marine biogeochemistry and ecosystem models: insights from the MarQUEST experience

### Session 7: Process modelling

12:00	631	Shubha Sathyendranath	Carbon-to-chlorophyll ratio of phytoplankton at sea and in cultures: importance and unresolved issues
12:20	389	Vincent Le Fouest	Impact of freshwater-associated bulk turbidity on the Gulf of St. Lawrence (Canada) plankton ecosystem: a high resolution 3-D modelling study

### 12:40 Lunch & Poster session 3

14:00	584	Coralie Perruche	An analytical study of competition between phytoplankton species
14:20	616	Markus Pahlow	Chain model of N and P limitation
14:40	588	S. Lan Smith	Multi-element ecosystem dynamics in the SERIES iron-enrichment experiment: comparing optimal uptake kinetics to Michaelis-Menten
15:00	546	Kevin Flynn	Modelling the release of dissolved organics by phytoplankton; meeting the challenge
15:20	562	Piet Ruardij	Modelling of TEP-diatom interactions (3D and 1D) driving sedimentation events in the North Sea

### 15:40 Tea

16:10	627	Aike Beckmann	A Fresh Look at the Biological Pump in the Oligotrophic Ocean
16:30	531	Philippe Cugier	Enlightening the role of benthic filter feeders on phytoplanktonic pelagic production : the case of Mont Saint Michel Bay, France
16:50	647	Jan Backhaus	Biological Parameterisation of Convection
17:10	706	Richard Rivkin	Marine microbial processes and food web interactions in an evolving polar environment

### 17:30 End

## Thursday 26 June

### Session 8: Challenges of the higher trophic levels

9:00	601	Christoph Stegert	Simulating the seasonal <i>Pseudocalanus elongatus</i> population dynamics in the German Bight for 2004
9:20	595	Marco Uttieri	Contrasting strategies in co-occurring copepods: <i>Clausocalanus furcatus</i> vs. <i>Oithona plumifera</i>
9:40	566	Jerry Wiggert	A modeling study of developmental stage and environmental variability effects on copepod foraging
10:00	576	Wendy Gentleman	Modelling copepod development: current limitations and a new realistic IBM
10:20	567	Eileen Hofmann	Insights into Oyster Population Genetics from an Individual-based Model

### 10:40 Coffee

11:10	551	Marie Savina	Sole ( <i>Solea solea</i> ) larvae transport in the southern North Sea: influence of larval behaviour combined with hydrodynamic processes
11:30	630	Sarah Gaichas	Identifying critical interactions and thresholds in eastern north Pacific ecosystems through model simulations

### Session 9: Ecosystems End to End

11:50	547	<b>Elizabeth Fulton</b>	<b>Keynote 7: Approaches to end to end ecosystem models</b>
12:20	554	Raghu Murtugudde	Implementation of regional earth system prediction for the Chesapeake Bay

### 12:40 Lunch & poster session 4

14:00	540	Wolfgang Fennel	Bridging the gap between biogeochemical and fish models
14:20	555	Yunne-Jai Shin	Functional response in a size-based world: a simulation experience in the Benguela ecosystem
14:40	561	Morgane Travers	Ecosystem effects of representing predation feedback in a two-way coupling between a plankton model and a fish model
15:00	651	Mark Baird	A size-resolved pelagic ecosystem model
15:20	648	Olivier Maury	Size-structured energy fluxes through the oceanic pelagic ecosystem: seasonal, inter-annual and decadal variability in the three oceans.

### 15:40 Tea

16:10	711	<b>Kenneth Rose</b>	<b>Keynote 8: Coupling hydrodynamic, NPZ, and fish models: can the biology and people keep up with the computers?</b>
16:40			Open discussion
17:20			Closing remarks

### 17:30 End & Conference dinner from 19:00