

TUESDAY 27 November 2007

Morning

REGISTRATION

- | | | | | | |
|-------|-------|---|-------|-------|--|
| 14.15 | 14.45 | <p>Welcome speech - MAIN LECTURE HALL
 <i>chair: Solidoro C.</i>
 Marson I. (OGS president)
 Sreenivasan K.R. (ICTP director)
 Legovic T. (ISEM)</p> <p>PLENARY - MAIN LECTURE HALL
 <i>chair: Legovic T.</i></p> | | | |
| 14.45 | 15.15 | <p>MODELLING EVOLUTION: PRINCIPLES AND APPLICATIONS
 Dieckmann U.</p> <p><i>chair: Legovic T.</i></p> | 15.15 | 15.30 | <p>ECOLOGICAL INDICATORS FOR THE PELAGIC OCEAN DEVELOPED FROM REMOTELY-SENSED IMAGERY
 Platt T. and Sathyendranath S.</p> |
| 15.30 | 15.45 | <p>BIOGEOCHEMICAL MODELS OF VEGETATION SUCCESSION AND BIODIVERSITY DYNAMICS
 Komarov A.</p> | 15.45 | 16.00 | <p>TOWARDS END-TO-END MODELING OF THE MARINE FOOD WEB
 Fennel W.</p> |
| 16.00 | 16.15 | <p>VIRTUAL OYSTERS IN THE TAGUS ESTUARY AND IN CHESAPEAKE BAY - A MODEL ANALYSIS OF SHELLFISH PRODUCTIVITY AND EUTROPHICATION CONTROL
 Ferreira J.G., Hawkins A.J.S., Bricker S.B., Bento V. and Xiao Y.</p> | 16.15 | 16.30 | <p>MODELLING OF MACROINVERTEBRATE COMMUNITY PATTERNS AFFECTED BY TOXIC SUBSTANCES AT LARGE SPATIO-TEMPORAL SCALES IN SCHELDT RIVER
 Gevrey M., Bottin M., Grenouillet G., van der Ohe P., de Deckere E., de Zwart D., Tudesque L. and Lek S.</p> |
| 16.30 | 17.00 | <p><i>coffee break</i></p> <p>GLOBAL CHANGES, DECADEAL SIMULATIONS AND INTERANNUAL VARIABILITY - MAIN LECTURE HALL
 <i>chair: Platt T.</i></p> | 17.00 | 17.15 | <p>CONSERVING AUSTRALIAN BIODIVERSITY IN THE FACE OF CLIMATE CHANGE
 Clarke H.</p> |
| 17.15 | 17.30 | <p>THE RESPONSE OF GLOBAL MARINE BIOGEOCHEMISTRY TO ATMOSPHERIC CO₂ INCREASE: SIMULATIONS WITH A COUPLED EARTH SYSTEM MODEL
 Vichi M., Patara L., Fogli P.G., Masina S. and E. Manzini</p> | 17.15 | 17.30 | <p>CONCEPTUAL FRAMEWORK OF LATTICE ECOSYSTEM SIMULATOR
 Mikhailov A.</p> |
| 17.30 | 17.45 | <p>INTERANNUAL TO INTERDECADAL VARIATIONS OF PRIMARY PRODUCTION AND CARBON CYCLE IN THE NORTH PACIFIC USING A 3-D NEMURO MODEL
 Aita M.N., Ishida A., Kishi M.J. and Yamanaka Y.</p> | 17.30 | 17.45 | <p>AN INTERACTIVE DECISION-SUPPORT TOOL FOR ASSESSING THE LONG-TERM IMPACTS OF VARIABLE RETENTION MANAGEMENT ON INDICATORS OF SUSTAINABLE FOREST MANAGEMENT
 Seely B., Cavens D., Kimmins J.P., Sheppard S. and Scoullar K.</p> |
| 17.45 | 18.00 | <p>MODELLING CURRENT AND FUTURE DISTRIBUTION OF EUROPEAN FOREST CATEGORIES
 Casalegno S., Amatulli G., Bastrup-Birk A. and Houston T.</p> | 17.45 | 18.00 | <p>MODELLING NET PRIMARY PRODUCTION OF NORTHERN EURASIA FORESTS: A NEW METHOD & A NEW ESTIMATE
 Shvidenko A., Schepaschenko D. and Nilsson S.</p> |
| 18.00 | 18.15 | <p>LONG-TERM SIMULATION OF THE EFFECT OF CLIMATE CHANGES ON THE GROWTH OF MAIN CENTRAL EUROPEAN FOREST TREE SPECIES.
 Tatarinov F.A. and Cienciala E.</p> | 18.00 | 18.15 | <p>ARTIFICIAL NEURAL NETWORK MODELS FOR IDENTIFYING NOVELTIES IN VEGETATION TIME SERIES
 Sae-Tang A., Perez-Urbe A., Jarvis A.</p> |
| 18.15 | 18.30 | <p>PUTTING ECOLOGY INTO SPECIES DISTRIBUTION MODELS
 Sarmento Cabral J., Schurr F. and Jeltsch F.</p> | 18.15 | 18.30 | <p>LINKING ABOVE- AND BELOWGROUND FOOD WEBS WITH AN INDIVIDUAL-BASED MODEL
 Meyer K.M., Vos M., Mooij W.M., Hol W.H.G. and van der Putten W.H.</p> |
| 18.30 | 18.45 | <p>RESPONSE OF THE NORTH SEA PLANKTON COMMUNITY TO CLIMATE CHANGE: PRELIMINARY RESULTS FROM A NETWORK ANALYSIS APPROACH.
 Vassallo P., Vezzulli L., Reid C. and Fabiano M.</p> | 18.30 | 18.45 | <p>A NETWORK MODEL OF BIRD MIGRATION
 Kölsch A. and Blasius B.</p> |
| 18.45 | | <p><i>ice break</i></p> | | | |

WEDNESDAY 28 November 2007

PLENARY - MAIN LECTURE HALL

chair: [Libralato S.](#)

- 9.00 9.30 **INDIVIDUAL-BASED MODELS OF COMMUNITIES AND ECOSYSTEMS: DREAM, NIGHTMARE, OR REALITY?**
Grimm V.
- 9.30 10.00 **SEALIFEBASE AS A SUPPORT SYSTEM FOR MODELLING MARINE ECOSYSTEMS**
Pauly D.
- 10.00 11.00 POSTER SESSION 1
- 11.00 11.15 *coffee break*
- MODEL APPLICATIONS TO TERRESTRIAL ECOSYSTEMS - MAIN LECTURE HALL**
chair: [Komarov A.](#)
- 11.15 11.30 **MAPPING THE RESILIENCE CHARACTERISTICS OF SOIL BY USING MULTI-OBJECTIVE REGRESSION MODELS**
[Debeljak M.](#), [Griffiths B.](#), [Hallett P.](#), [Kocov D.](#), [Towers W.](#) and [Dzeroski S.](#)
- 11.30 11.45 **APPLICATION OF A THREE-DIMENSIONAL MODEL FOR ASSESSING EFFECTS OF SMALL CLEAR-CUTTINGS ON SOIL TEMPERATURE**
[Olchev A.](#), [Radler K.](#), [Panferov O.](#), [Sogachev A.](#) and [Gravenhorst G.](#)
- 11.45 12.00 **MODELLING DYNAMICS OF SOIL ORGANIC MATTER UNDER HISTORICAL LAND-USE MANAGEMENT IN EUROPEAN RUSSIA**
[Bobrovsky M.](#), [Komarov A.](#), [Kubasova T.](#) and [Mikhailov A.](#)
- 12.00 12.15 **MODELING AND MONITORING OF THE CARBON DIOXIDE FLUXES IN SOUTHERN EUROPEAN TAIGA**
[Kurbatova J.](#), [Varlagin A.](#), [Olchev A.](#), [Shalukhina N.](#) and [Li Ch.](#)
- 12.15 12.30 **THE EVOLUTION OF CO-EXISTING LEARNING AND NON-LEARNING FORAGING STRATEGIES**
[Eliassen S.](#), [Mangel M.](#) and [Giske J.](#)
- 12.30 12.45 **DYNAMICS OF DISTURBED TROPICAL RAIN FORESTS**
[Huth A.](#), [Puetz S.](#), [Groeneveld J.](#), [Köhler P.](#) and [Rueger N.](#)
- 12.45 13.00 **DIFFERENCE OF ECOLOGICAL STRATEGIES OF CONIFEROUS TREE SPECIES IN CANADIAN AND EUROPEAN BOREAL FORESTS: SIMULATION MODELLING ANALYSIS**
[Chertov O.](#), [Bhatti J.](#), [Komarov A.](#), [Apps M.](#), [Mikhailov A.](#), [Bykhovets S.](#)
- 13.00 14.30 *lunch*
- PLENARY - MAIN LECTURE HALL**
chair: [Crise A.](#)
- 14.30 15.00 **FROM FISHERIES OCEANOGRAPHY TOWARDS ECOSYSTEM OCEANOGRAPHY**
Cury P.
GLOBAL CHANGES, DECADEAL SIMULATIONS AND INTERANNUAL VARIABILITY - MAIN LECTURE HALL
chair: [Crise A.](#)
- 15.00 15.15 **MODEL RECONSTRUCTION AND FUTURE EVOLUTION OF PHAEOCYSTIS COLONY BLOOMS IN BELGIAN COASTAL WATERS (SOUTHERN NORTH SEA) AS A FUNCTION OF HUMAN ACTIVITY ON THE WATERSHED**
[Lancelot C.](#) and [Gypens N.](#)
- 15.15 15.30 **CONSIDERATIONS ON THE DEEP CHLOROPHYLL MAXIMUM DEPTH IN THE MEDITERRANEAN SEA**
[Lazzari P.](#) and [Crise A.](#)
- 15.30 15.45 **INTERANNUAL VARIABILITY OF THE SPRING PHYTOPLANKTON BLOOM IN THE NORTH SEA INVESTIGATED BY MODELLING AND REMOTE SENSING**
[Lacroix G.](#), [Park Y.](#), [Ruddick K.](#) and [Lancelot C.](#)
- 15.45 16.00 **MODELLING THE HISTORICAL TRENDS OF THE ADRIATIC SEA DEMERSAL ASSEMBLAGES AS A BASIS FOR ECOSYSTEM RECOVERY**
[Osio G.C.](#) and [Ferretti F.](#)
- 16.00 16.15 **MODELLING IMPACTS OF FISHING AND CLIMATE CHANGE IN SOUTHEASTERN AUSTRALIA USING EWE**
[Bulman C.](#), [Condie S.](#), [Cahill M.](#), [Furlani D.](#) and [Klaer N.](#)
- 16.15 16.30 **EXAMINING INDICATORS OF ECOSYSTEM CHANGES AND EFFECTS OF EXPLOITATION FROM TROPHIC MODELS FITTED TO TIME SERIES DATA IN THREE ECOSYSTEMS**
[Shannon L.J.](#), [Coll M.](#) and [Neira S.](#)
- 16.30 17.00 *coffee break*
- GLOBAL CHANGES, DECADEAL SIMULATIONS AND INTERANNUAL VARIABILITY - MAIN LECTURE HALL**
chair: [Lancelot C.](#)
- 17.00 17.15 **LINKING SPECIES- AND ECOSYSTEM-LEVEL IMPACTS OF CLIMATE CHANGE IN SHALLOW LAKES WITH SIMPLE AND COMPLEX MODELS**
[Mooli W.M.](#) and [Janse J.H.](#)
- 17.15 17.30 **DOES CHANGE IN FLOW REGIME OF RIVERS ALTER THE MACROINVERTEBRATE ASSEMBLAGES?**
[Hennig A.](#), [Griebeler E.M.](#) and [Seitz A.](#)
- 17.30 17.45 **POTENTIAL EFFECTS OF PLANT MIGRATION ON GLOBAL VEGETATION CHANGES FOR THE NEXT 100 YEARS: A SIMULATION STUDY USING A DYNAMIC GLOBAL VEGETATION MODEL, SEIB-DGVM**
[Sato H.](#)
- 17.45 18.00 **MODELLING OF CLIMATE CHANGE INDUCED VEGETATION CHANGES: LAGS BY SUCCESSION AND MIGRATION**
[Lischke H.](#)
- 18.00 18.15 **EFFECT OF SPATIAL PROCESSES ON THE EVOLUTION OF ECOLOGICAL NICHE AND DISPERSAL IN METACOMMUNITY SYSTEMS**
[Büchi L.](#) and [Hirzel A.](#)
- 18.15 19.00 *ISEM meeting (Jorgensen S.E. and Legovic T.)*

FISH DYNAMICS AND INTEGRATED BIOGEOCHEMICAL ECOSYSTEM MODELS - ROOM C

chair: [Soldoro C.](#)

- 11.15 11.30 **ECOSYSTEM EFFECTS OF REPRESENTING PREDATION FEEDBACK IN A TWO-WAY COUPLING BETWEEN A PLANKTON MODEL AND A FISH MODEL**
[Travers M.](#), [Shin Y.-J.](#), [Field J.](#), [Cury P.](#) and [Jennings S.](#)
- 11.30 11.45 **INTEGRATION OF BIOGEOCHEMICAL PROCESSES IN FOOD WEB MODELS FOR END-TO-END CONCEPTUALISATION OF MARINE ECOSYSTEMS**
[Libralato S.](#) and [Soldoro C.](#)
- 11.45 12.00 **FUNCTIONAL RESPONSE IN A SIZE-BASED WORLD: A SIMULATION EXPERIENCE IN THE BENGUELA ECOSYSTEM**
[Shin Y.-J.](#) and [Travers M.](#)
- 12.00 12.15 **LINKING A LOWER TROPHIC LEVEL BIOGEOCHEMICAL MODEL WITH AN UPPER TROPHIC LEVEL ECOSYSTEM MODEL**
[Kearney K.](#), [Sarmiento J.](#), [Christensen V.](#), [Gnanadesikan A.](#), [Stock C.](#) and [Guenette S.](#)
- 12.15 12.30 **A COUPLED PLANKTON-ANCHOVY POPULATION DYNAMICS MODEL ASSESSING IMPACTS OF PREDATION AND FISHERY CONTROLS ON BLACK SEA ANCHOVY STOCKS DURING 1980S**
[Oguz T.](#) and [Sallihoglu B.](#)
- 12.30 12.45 **A BIOPHYSICAL MODEL TO STUDY THE DYNAMICS OF SARDINE AND ANCHOVY ICHTHYOPLANKTON IN THE CANARY UPWELLING SYSTEM. II. AFRICAN COAST - CANARY ARCHIPELAGO CONNECTIONS.**
[Brochier T.](#), [Ramzi A.](#), [Lett C.](#), [Machu E.](#), [Hernández-León S.](#) and [Fréon P.](#)
- 12.45 13.00 **A FISH BIOENERGETICS MODEL OF EUROPEAN ANCHOVY COUPLED TO A LOWER TROPHIC ECOSYSTEM MODEL**
[Politikos D.](#), [Triantafyllou G.](#), [Somarakis S.](#) and [Petyxakis G.](#)
- 13.00 14.30 *lunch*
- FISH DYNAMICS AND INTEGRATED BIOGEOCHEMICAL ECOSYSTEM MODELS - ROOM C**
chair: [Shin Y.](#)
- 15.00 15.15 **THE USE OF MODIFIED LESLIE MATRIX AND GENETIC ALGORITHMS TO MODEL JELLYFISH POPULATION (PELAGIA NOCTILUCA, SCYPHOZOA)**
[Malej M.](#), [Malej A.](#) and [Malej A.](#)
- 15.15 15.30 **MODELLING THE DYNAMICS OF SKATES: PROGRESS AND CHALLENGES**
[Gertseva V.](#), [Gertsev V.](#) and [Schirripa M.](#)
- 15.30 15.45 **A MODEL OF FISH POPULATION DYNAMICS BASED ON SPATIALLY EXPLICIT TROPHIC RELATIONSHIPS**
[Bonneaud S.](#), [Blanchard F.](#), [Chevaillier P.](#), [Thébault D.](#) and [Redou P.](#)
- 15.45 16.00 **NON-IDEAL PREDATORS AND RESOURCE DYNAMICS: IMPLICATIONS FOR SPATIALLY STRUCTURED FISH-ANGLER INTERACTIONS**
[Matsumura S.](#), [Dieckmann U.](#) and [Arlinghaus R.](#)
- 16.00 16.15 **NATURAL AND ANTHROPOGENIC INFLUENCES ON THE SPECIES RICHNESS OF REEF FISH ASSEMBLAGES IN THE TUAMOTU ARCHIPELAGO (FRENCH POLYNESIA)**
[Mellin C.](#), [Ferraris J.](#), [Galzin R.](#), [Harmelin-Vivien M.](#), [Kulbicki M.](#) and [Lison de Loma T.](#)
- 16.15 16.30 **EXPLORING FISH SPECIES DIVERSITY CHANGES USING SIZE SPECTRA**
[Longo C.S.](#), [Rochet M.J.](#), [Colloca F.](#), [Pierce G.J.](#), [Pascalis S.](#) and [Greenstreet S.P.R.](#)
- 16.30 17.00 *coffee break*
- MODEL APPLICATIONS - ROOM C**
chair: [Laroque G.](#)
- 17.00 17.15 **THE APPLICATION OF IBM TO REPRESENT AGRICULTURAL BIODIVERSITY UNDER DIFFERENT MANAGERMENTS**
[Humphry R.W.](#), [Caron-Lormier G.](#), [Hawes C.](#) and [Bohan D.A.](#)
- 17.15 17.30 **TESTING THE GENERALITY OF DRY MATTER ALLOCATION BASED ON ALLOMETRIC EQUATIONS IN A HYBRID FOREST MODEL**
[Seidl R.](#), [Rammer W.](#), [Panagiotis B.](#), [Hochbichler E.](#) and [Lexer M.J.](#)
- 17.30 17.45 **MODELING SUSTAINABILITY OF A FLOODPLAIN FOREST ECOSYSTEM**
[Laganis J.](#) and [Debeljak M.](#)
- 17.45 18.00 **THE ECONOMICS OF A STAGE-STRUCTURED WILDLIFE POPULATION MODEL**
[Skonhofs A.](#)
- 18.00 18.15 **MATHEMATICAL MODELING OF LARGE FOREST FIRE INITIATION**
[Perminov V.](#)

THURSDAY 29 November 2007

<p>PLENARY - MAIN LECTURE HALL <i>chair: Cossarini G.</i></p>					
9.00	9.30	STRUCTURALLY DYNAMIC MODELLING Jørgensen S.E.			
9.30	10.00	THE MULTI-SCALE INTEGRATED MODEL OF THE EARTH SERVICES (MIMES), THE DYNAMICS, MODELING AND VALUATION OF ECOSYSTEM SERVICES Boumans R.			
10.00	11.00	POSTER SESSION 2			
11.00	11.15	coffee break			
<p>BIODIVERSITY AND EVOLUTION - MAIN LECTURE HALL <i>chair: Bastianoni S.</i></p>		<p>MODEL APPLICATIONS - ROOM C <i>chair: Hull V.</i></p>			
11.15	11.30	HUTCHINSON REVISITED: VARIABILITY IN MECHANISMS OF DENSITY REGULATION FACILITATES SPECIES COEXISTENCE Münkemüller T., Bugmann H. and Johst K.	11.15	11.30	FUTURE OF MARINE RENEWABLE RESOURCES MANAGEMENT Legovic T.
11.30	11.45	RED QUEEN NICHE DYNAMIC ON A NETWORK OF ECOLOGICAL INTERACTIONS. Dommar D' Lima C., Ryabov A., and Blasius B.	11.30	11.45	MODELLING THE IMPACT OF FINFISH AQUACULTURE ON SEDIMENT BIOGEOCHEMISTRY Brigolin D., C.J. Cromey, T.D. Nickell, D.R. Aguilera, P. Regnier and Pastres R.
11.45	12.00	COOPERATION IN N-PLAYER PRISONER'S DILEMMA THRESHOLD GAME Boza G., Könyu B. and Számadó Sz.	11.45	12.00	A SYSTEM DYNAMICS MODEL FOR THE MANAGEMENT OF MANILA CLAM, RUDITAPES PHILIPPINARUM (ADAMS & REEVE, 1850) IN THE BAY OF ARCAÇON (FRANCE) Bald J., Siquin A., Borja A., Cail-Milly N., Duclerq B., Dang C. and de Montaudouin X.
12.00	12.15	WHY DON'T ENDEMIC SPECIES TAKE ADVANTAGE OF AVAILABLE HABITATS? ECOLOGY VS. BIOGEOGRAPHY IN THE DISTRIBUTION OF AN IBERIAN ENDEMIC DAFFODIL Lomba A., Sillero N., Gonçalves J.A., Guisan A., Alves P., Vicente J., Moreira F. and Honrado J.	12.00	12.15	MODELLING DEPOSITION OF PARTICULATE ORGANIC WASTE UNDERNEATH AQUACULTURE FACILITIES: VALIDATION OF KK3D MODEL Jusup M., Klanjšček J. and Legovic T.
12.15	12.30	THE TRADE-OFF BETWEEN IMPROVING BIODIVERSITY DATA AND MORE RAPID CONSERVATION Grantham H.S., Wilson K.A., Pressey R.L., and Possingham H.P.	12.15	12.30	USING AN ECOSYSTEM DYNAMICS MODEL TO EVALUATE MONITORING BASED FISHERY MANAGEMENT IN AN UNCERTAIN WORLD Hill S., Watters, G., Reid K. and Hinke J.
12.30	12.45	ADAPTIVE DYNAMICS SHAPES PREDATOR-PREY CYCLES Merico A., Wirtz K. and Bruggeman J.	12.30	12.45	A MULTI OBJECTIVE, BIOECONOMIC ANALYSIS OF A SMALL SCALE EEL FISHERY IN CAMARGUE. Bevacqua D., Melià P., Crivelli A.J., Gatto M. and De Leo G.A.
12.45	13.00	AN ADAPTING, TRAIT-BASED ECOSYSTEM MODEL FOR PHYTOPLANKTON SUCCESSION Bruggeman J., Merico A., Gaedke U., Kooijman S.A.L.M., Wirtz K.W.	12.45	13.00	MATHEMATICAL MODELLING FOR CONSERVATION AND MANAGEMENT OF GORCONIA CORALS Iannelli M., Bramanti L. and Santangelo G.
13.00	14.30	lunch	13.00	14.30	lunch
<p>PLENARY - MAIN LECTURE HALL <i>chair: Fath B.</i></p>		<p>MODEL APPLICATIONS - ROOM C <i>chair: Pastres R.</i></p>			
14.30	15.00	SYNCHRONIZATION OF METACOMMUNITIES WITH APPLICATION TO PREY-PREDATOR SYSTEMS Rinaldi R.	15.00	15.15	EMERGENCY VALUES OF HYDROTHERMAL GENESIS ELEMENTS. Bosco S., Ridolfi R., Moro G., Marchettini N. and Bastianoni S.
15.00	15.15	A GLOBAL MODEL FRAMEWORK FOR THE ASSESSMENT OF AQUATIC BIODIVERSITY Janse J.H., Van Drecht G., Bouwman L., De Waal E., Weijters M.J. and Alkemade R.	15.15	15.30	RECOVERY OR DECLINE OF THE BLACK SEA: A SOCIETAL CHOICE REVEALED BY SOCIO-ECOLOGICAL MODELLING Langmead O., Mee L.D., McQuatters-Gollop A., Friedrich J., Gilbert A.J., Jackson E.L., Knudsen S. and Todorova V.
15.15	15.30	AN INDIVIDUAL-BASED MODEL FOR DESCRIBING THE BULLHEAD POPULATION DYNAMICS IN A RIVER NETWORK Charles S., Subtil F. and Pont D.	15.30	15.45	MODELLING THE SIGNIFICANCE OF SPECIES BIOENERGETICS ON POLLUTANT BIOMAGNIFICATION IN AQUATIC ECOSYSTEMS. Paterson G., Drouillard K. and Haffner D.
15.30	15.45	HABITAT SELECTION IN LARVAL FISH - INDIVIDUAL RULE-BASED BEHAVIOUR IN GENERAL OCEAN CIRCULATION MODELS Fiksen Ø., Jørgensen C., Vikebø F. and Kristiansen T.	15.45	16.00	STOCHASTIC SIMULATIONS FOR ASSESSMENT OF UNCERTAINTY OF SPATIAL DISTRIBUTION AND BIOMASS OF MARINE LIVING RESOURCES Saveleva E., Bizikov V., Goncharov S., Popov S., Mazzola S., Bonanno A. and Patti B.
15.45	16.00	QUANTIFYING INTERACTING POPULATION DYNAMICS TO DETERMINE THE STRUCTURE OF COASTAL MEDITERRANEAN BENTHIC COMMUNITIES. Moritz C., Loeuille N., Guarini J.M. and Guizien K.	16.00	16.15	POINT SOURCE POLLUTION DETECTION WITH A COMBINATION OF DIRECT AND INVERSE MODELLING Vujanovic M., Rajkovic B. and Grsic Z.
16.00	16.15	GENETIC DIVERSITY IN CYCLIC AND STABLE POPULATIONS OF DAPHNIA: A SIMULATION APPROACH Vanoverbeke J. and De Meester L.	16.15	16.30	ZOOPLANKTON POPULATION MODELS IMPLEMENTED IN THE MODULAR NUMERICAL TOOL (ECO3M) DEDICATED TO BIOGEOCHEMICAL MODELLING: CALIBRATION AND SIMULATIONS FOR THE CASE OF THE NORTH WESTERN MEDITERRANEAN SEA. Eisenhauer L., Carlotti F., Baklouti M. and Diaz F.
16.15	16.30	A HYBRID DEMOGRAPHIC-GENETIC MODEL TO PROBE THE ORIGIN OF GENETIC DIFFERENTIATION IN EUROPEAN EEL SUB-POPULATIONS. Andreollo M., Bevacqua D., Piovani P. and De Leo G.A.			
16.30	17.00	coffee break	16.30	17.00	coffee break
<p>BIODIVERSITY AND EVOLUTION - MAIN LECTURE HALL <i>chair: Nielsen S.</i></p>		<p>MODEL APPLICATIONS - ROOM C <i>chair: Lek S.</i></p>			
17.00	17.15	FINDING DRIVING FACTORS OF DIVERSITY- ECOSYSTEM FUNCTIONING RELATIONSHIPS IN GRASSLANDS - A MODEL ANALYSIS Reinhold T., Dähring H., Schumacher J. and Wirth C.	17.00	17.15	IMPACTS OF HYDROMORPHOLOGY AND LAND-USE ON FISH COMMUNITIES AT EUROPEAN SCALE Gevrey M., Grenouillet G., Tisseuil C. and Lek S.
17.15	17.30	HOST-PARASITOID SPATIAL DYNAMICS IN HETEROGENEOUS LANDSCAPES Hirzel A.H., Nisbet R.M. and Murdoch W.W.	17.15	17.30	THE DEVELOPMENT OF HABITAT SUITABILITY CURVES FOR USE IN BROWN TROUT (SALMO TRUTTA) HABITAT MODELLING IN SMALL LOWLAND STREAMS UNDER WATER FRAMEWORK DIRECTIVE CONDITIONS. Conallin J., Pedersen S., Kroegsgaard J.J., Jowett I. and Boegh E.
17.30	17.45	TURING BIFURCATION IN A RATIO-DEPENDENT PREDATOR-PREY MODEL WITH DIFFUSION Shaban Aly	17.30	17.45	IMPACT OF THE CONSTRUCTION OF THE VENICE LAGOON MOBILE BARRIERS (MOSE) ON THE HYDRODYNAMICS AND ITS INFLUENCE ON THE ECOLOGICAL ASPECTS Ghezzi M., Guerzoni S., Umgieser G. and Cucco A.
17.45	18.00	HOW TO MODEL SPECIES DIVERSITY ON REGIONAL SCALE: UPSCALING PROCESSES AND FUNCTIONAL TYPE MODELLING Rossmannith E., Blaum N., Schwager M., Jeltsch F.	17.45	18.00	SENSITIVITY AND UNCERTAINTY ANALYSIS OF THE INCA-N MODEL IN APPLICATION TO A LARGE RIVER BASIN, THE GARONNE, SW FRANCE Tisseuil C., Futter M.N., Wade A.J. and Lek S.
18.00	18.15	THE EVOLUTION OF DENSITY-DEPENDENT DISPERSAL IN A NOISY SPATIAL POPULATION MODEL Kun A. and Scheuring I.			
18.15		social dinner & excursion			

FRIDAY 30 November 2007

PLENARY - MAIN LECTURE HALL

chair: *Melaku Canu D.*

9.00 9.30 **EASTERN U.S. CONTINENTAL SHELF CARBON BUDGET: INTEGRATING MODELS, DATA ASSIMILATION, AND ANALYSIS**
Hofmann E.

9.30 10.00 **GÖDEL, PRIGOGINE, ZADEH, UEXKÜLL, BOHM: AN ETERNAL GOLDEN BRAID AND THE THEORY OF ENVIRONS**
Patten B.C.

10.00 11.00 POSTER SESSION 3

11.00 11.15 *coffee break*

BIOGEOCHEMICAL MODELS AND DATA ASSIMILATION - MAIN LECTURE HALL

chair: *Oguz T.*

11.15 11.30 NUTRIENT DRIVEN REGIME SHIFTS IN SHALLOW COASTAL ECOSYSTEMS: A MODELLING APPROACH
Zaldivar Comanges J., Bacelar, F., Dueri S., Hernández-García E. and Viaroli P.

11.30 11.45 MODELING OF THE CONTRIBUTION OF DISSOLVED INORGANIC NITROGEN (DIN) FROM LITTERFALL OF ADJACENT MANGROVE FOREST TO HOOGHLY-MATLA ESTUARY, INDIA
Rav S.

11.45 12.00 MODELING OF THE PRIMARY PRODUCTION IN THE BIZERTHE LAGOON - EFFECTS OF THE CLIMATIC CHANGES BY AN HYDRO-ECOLOGICAL THREE-DIMENSIONAL MODEL
Bejaoui B., Harzallah A. and Moussa M.

12.00 12.15 BIOGEOCHEMICAL BUDGET THROUGH THE STRAIT OF GIBRALTAR, A MODELLING STUDY.
Macías D., Bruno M., Echevarría F., Vazquez A. and García C.M.

12.15 12.30 SEEK BASED DATA ASSIMILATION OF BIOGEOCHEMICAL DATA IN MARINE ECOSYSTEM DYNAMICS
Butenschön M. and Zavatarelli M.

12.30 12.45 COMPARING OPTIMAL UPTAKE KINETICS AND MICHAELIS-MENTEN BY ASSIMILATING DATA FROM THE SERIES FE-ENRICHMENT EXPERIMENT INTO A MARINE ECOSYSTEM MODEL
Smith S.L., Yoshie N., and Yamanaka Y.

12.45 13.00 A SIMPLE ASSIMILATIVE CAPACITY MODEL FOR RIA FORMOSA (PORTUGAL): AN ADAPTATION OF THE DYNAMIC CSTT MODEL
Brito A., Fernandes T., Tett P. and Newton, A.

13.00 14.30 *lunch*

PLENARY - MAIN LECTURE HALL

chair: *Zaldivar Comanges J.*

14.30 15.00 **MACHINE LEARNING AND ECOLOGICAL MODELLING: SUCCESSES AND CHALLENGES**
Dzeroski S.

BIOGEOCHEMICAL MODELS AND DATA ASSIMILATION - MAIN LECTURE HALL

chair: *Zaldivar Comanges J.*

15.00 15.15 ECOSYSTEM MODELLING: TOWARDS THE DEVELOPMENT OF A MANAGEMENT TOOL FOR A MARINE COASTAL SYSTEM PART-II, ECOSYSTEM PROCESSES AND BIOGEOCHEMICAL FLUXES
Petihakis G., Triantafyllou G., Korres G. and Theodorou A.

15.15 15.30 MODELING THE COPEPOD-PHYTOPLANKTON INTERACTIONS IN PRESENCE OF CHEMICAL DEFENSES
Botte V., Iudicone D., Mazzocchi M.G. and Ribera d'Alcala' M.

15.30 15.45 LIGHT AND NITROGEN EFFECTS ON THE GROWTH DYNAMICS OF SEAGRASS POSIDONIA OCEANICA: A MODEL STUDY
Elkalay K., Khalil K., Gobert S., Frangoulis C., Hecq J.H., Loudiki M. and Lepoint G.

15.45 16.00 TOWARDS A MECHANISTIC RIVER MODEL FOR THE BENTHIC COMMUNITY AND BIOGEOCHEMICAL CYCLES
Schuwirth N. and Reichert P.

16.00 16.15 SIMULATING DAPHNIA POPULATION DYNAMICS IN A MESOCOSM EXPERIMENT WITH A SIZE-STRUCTURED MODEL.
Schalau K., Berger S. A., Rinke K., Stralile D. and Peeters F.

16.15 16.30 A DYNAMIC MODEL OF AN EXPERIMENTAL BLOOM OF COCCOLITHOPHORES EMILIANA HUXLEYI
Joassin P., Borges A.V., Chou L., Delille B., Engel A., Harlay J., Jacquet S., Riebesell U., Rochelle-Newall E., Zondervan I., Soetaert K. and Gregoire, M.

16.30 17.00 *coffee break*

BIOGEOCHEMICAL MODELS AND DATA ASSIMILATION - MAIN LECTURE HALL

chair: *Zavatarelli M.*

17.00 17.15 OXYGEN DYNAMICS IN COASTAL LAGOONS: A MODELLING APPROACH
Hull V., Falucci M. and Parrella L.

17.15 17.30 MODELS TO UNDERSTAND THE FUNCTIONING OF REMOTE ECOSYSTEMS: AN EXAMPLE FROM THE MID-ATLANTIC RIDGE HYDROTHERMAL VENTS
Martins L., Colaço A., Dando P.R., Desbruyères D., Marques J.C. and Serrão-Santos R.

17.30 17.45 THE EFFECTS OF PARTICULATE INORGANIC PHOSPHORUS ON WATER QUALITY AND PHYTOPLANKTON BIOMASS IN THE EUTROPHIC LAKE BARATO, JAPAN
Shinohara R., Okunishi T., Tachibana H., Yamashita T. and Isobe M.

17.45 18.00 BISTABILITY AND COMPETITION OUTCOME OF PHYTOPLANKTON IN A WATER COLUMN WITH AN UPPER MIXED LAYER
Rudolf L., Ryabov A. and Blasius B.

18.00 18.15 ROLE OF COMPETITION IN PHYTOPLANKTON POPULATION FOR THE OCCURRENCE AND CONTROL OF PLANKTON BLOOM IN THE PRESENCE OF ENVIRONMENTAL FLUCTUATIONS
Pal S., Chatterjee S. and Chattopadhyay J.

18.15 18.30 A DOWNSCALING EXPERIMENT FOR THE LAGOON OF VENICE. TESTING POTENTIAL IMPACTS OF CHANGES IN PRECIPITATION TEMPORAL PATTERNS ON BIOGEOCHEMICAL PROPERTIES
Solidoro C., Cossarini G., Libralato S., Salon S. and Giorgi F.

18.30 18.45 ASSIMILATION OF WATER QUALITY DATA IN A 3D ECOSYSTEM MODEL OF THE LAGOON OF VENICE
Cossarini G., Solidoro C. and Lermusiaux P.

18.45 19.00 *Closure*

NETWORK THEORY AND APPLICATIONS OF NETWORK MODELS - ROOM C

chair: *Mackinson S.*

11.15 11.30 ECOPATH WITH ECOSIM 6: A NEW GENERATION
Christensen V., Buszowski J., Forrest R., Gao F., Heymans J.J., Hoover C., Hui J., Lai S., Steenbeek J., Walters W., and Walters C.J.

11.30 11.45 A NETWORKS ECONOMICS APPROACH TO TROPHIC SYSTEMS
Mullon C., Cury P. and Shin Y.J.

11.45 12.00 QUANTITATIVE VERSUS QUALITATIVE MODELLING: A COMPLEMENTARY APPROACH
Favilla S., Bondavalli C. and Bodini A.

12.00 12.15 NORTHERN ADRIATIC SEA ECOSYSTEM MODEL: TROPHIC NETWORK ANALYSIS, TIME SIMULATION AND SPATIAL DYNAMICS.
Barousse A., Artioli Y., Palmeri L., Duci A. and Mazzoldi C.

12.15 12.30 AN ECOPATH MODEL OF THE BALTIC SEA FOOD WEB
Niiranen S., Stipa T., Pääkkönen J-P., Norkko A.

12.30 12.45 ABUNDANCE AND TROPHIC INTERACTIONS IN NORTH SEA FISHES
Daskalov G.M. and Mackinson S.

12.45 13.00 WHICH FORCING FACTORS FIT? RELATIVE INFLUENCE OF CLIMATE AND FISHING ON THE DYNAMICS OF GADIDS AND SMALL PELAGIC FISH.
Mackinson S., Shannon L., Arancibia H., Arreguin-Sanchez F. and Heymans S.

13.00 14.30 *lunch*

NETWORK THEORY AND APPLICATIONS OF NETWORK MODELS - ROOM C

chair: *Christensen V.*

15.00 15.15 REDUCING QUALITATIVE UNCERTAINTY TO INCREASE QUANTITATIVE PREDICTABILITY IN ECOSYSTEM MODELS
Metcalfe S.J., Hobday A.J., Dambacher J.M. and Lyle J.M.

15.15 15.30 TESTING HYPOTHESES OF BIOSTRUCTURAL DEGRADATION IN MEDITERRANEAN SEA FOOD WEBS USING STOCHASTIC AND MASS-BALANCE MODELLING
Coll M., Lotze H.K. and Romanuk T.

15.30 15.45 ECOLOGICAL UTILITY ANALYSIS: ON THE EMERGENCE OF POSITIVE INTERACTIONS BETWEEN ORGANISMS IN ECOSYSTEMS
Patten B.C. and Stuart J. Whipple

15.45 16.00 INDIRECT RELATIONSHIPS BETWEEN COMPONENTS OF THE KUOSHENG BAY TROPHIC NETWORK (TAIWAN)
Jordán F. and Liu W-C.

16.00 16.15 REVISITING ECOLOGICAL NETWORK PROPERTIES USING A LAGRANGIAN APPROACH
Kazanci C. and Tollner E.W.

16.15 16.30 INVERSE MATRIX: AN ALTERNATIVE OF ECOPATH WITH ECOSIM TO TEST INTERACTIONS BETWEEN SPECIES IN THE GIRONDE ESTUARY (FRANCE)
Rochette S., Lobry J., Lepage M., and Boët Ph.

16.30 17.00 *coffee break*

NETWORK THEORY AND APPLICATIONS OF NETWORK MODELS - ROOM C

chair: *Coll M.*

17.00 17.15 ENERGY PATHWAYS IN ECOLOGICAL FOOD WEBS
Fath B.D. and Geir H.

17.15 17.30 ECOTROPH : MODELING MARINE ECOSYSTEM FUNCTIONING AND IMPACT OF FISHING
Gascuel D., Christensen V. and Pauly D.

17.30 17.45 IDENTIFYING MECHANISMS UNDERLYING THE BEHAVIOUR OF ECOSYSTEM-BASED REFERENCE POINTS IN AN EXPLOITED UPWELLING ECOSYSTEM
Neira S., Moloney C., Cury P., Christensen V., Shannon L., Jarre A. and Arancibia H.

17.45 18.00 FROM BIOLOGICAL DATA TO STOICHIOMETRICALLY INTEGER NETWORKS, INCLUDING THE SUBSEQUENT ANALYSIS FOR ECOSYSTEM NUTRIENT DEPENDENCIES AND LIMITATIONS
Scharer U.M. and Ulanowicz R.E.

18.00 18.15 ECOSYSTEM EXPLOITATION AND TROPHODYNAMIC INDICATORS: A COMPARISON BETWEEN THE NORTHERN ADRIATIC SEA AND SOUTHERN NEW ENGLAND
Pranovi F. and Link J.

18.15 18.30 LINK QUALITY AND NON-TROPHIC EFFECTS: CHALLENGES IN THE STUDY OF TOPOLOGICAL KEYSTONE SPECIES
Vasas V. and Jordán F.

18.30 18.45 HOW CAN WE EVALUATE THE IMPORTANCE OF MALES? - AN ADAPTATION OF THE KEYSTONE CONCEPT TO A FISHED MANGROVE CRAB POPULATION OF UCIDES CORDATUS
Berger U. and Piou C.