

# MSEAS 2016

**Understanding marine socio-ecological systems**  
Including the human dimension in integrated ecosystem assessment

## PROGRAMME



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 #MSEAS2016





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**Understanding marine socio-ecological systems**  
**Including the human dimension in integrated ecosystem assessment**





# MSEAS 2016

**T**he focus of the symposium will be on integration and assessment across multiple ocean uses and sectors, including: fisheries, renewable energy, coastal development, oil and gas, transport, and conservation.

There will be a particular emphasis on the methodological and empirical challenges involved in including human dimensions in integrated ecosystem assessments.

The symposium will be global in scope, with a focus on regions in which integrated ocean management policies have been developing in the last two decades.

## Conveners

**Jason Link**, USA

**David C. Smith**, Australia

**Olivier Thébaud**, France

## Scientific Steering Committee

**Keith Criddle**, University of Alaska, USA

**Luc Doyen**, CNRS, France

**Stewart Frusher**, University of Tasmania, Australia

**Jan Jaap Poos**, Wageningen UR, The Netherlands

**Simon Jennings**, CEFAS, UK

**Marloes Kraan**, IMARES Wageningen UR, The Netherlands

**Jason Link**, NOAA, USA

**Doug Lipton**, NOAA, USA

**Cristina Pita**, University of Aveiro, Portugal

**Jake Rice**, DFO, Canada

**Jörn Schmidt**, University of Kiel, Germany

**David C Smith**, CSIRO, Australia

**Tony Smith**, CSIRO, Australia

**Olivier Thébaud**, Ifremer, France



## Organizing committee

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**Annie Cudennec**, Université de Brest, France

**Luc Doyen**, CNRS, France

**Séverine Julien**, Université de Brest, France

**Pascal Le Floc'h**, Université de Brest, France

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# SPONSORS





# GENERAL PROGRAMME





## PROGRAMME OF THE WEEK (Part 1)

DATE	START	END	GENERAL PROGRAMME
MONDAY May 30	8h00	9h00	Registration
	9h00	9h30	Introduction
	9h30	10h30	<b>Keynote speaker</b> <b>Serge Garcia:</b> « Fisheries from biological clockworks to socio-ecological systems and ecosystems services »
	Room Mérienne		
	10h30	11h00	Coffee break
	11h00	12h00	<b>Introductory talks</b> <ul style="list-style-type: none"> <li>• Torgeir Edvardsen, OECD</li> <li>• Paul Holthus , World Ocean Council, USA</li> <li>• Pim Visser, EAPO, Netherlands</li> </ul>
	Room Mérienne		
	12h00	13h00	Lunch
	13h00	14h00	<b>Keynote speaker</b> <b>Jake Rice:</b> « Fisheries Governance in an SES system: All Things for All People or All Things for All Creatures? »
	Room Mérienne		
	14h00	15h00	<b>Introductory talks</b> <ul style="list-style-type: none"> <li>• François Gauthiez, French Marine Protected Area Agency, France</li> <li>• Mark Dickey-Collas, ICES, Denmark</li> <li>• Alida Bundy, Bedford Institute of Oceanography, Canada</li> </ul>
	Room Mérienne		
	15h00	15h15	<b>Howard Browman</b> , Editor-in-Chief, ICES Journal of Marine Science
	15h15	15h45	Coffee break
15h45	17h45	Parallel sessions 1	
17h45	19h00	Brest City Council Welcome Reception	
TUESDAY May 31	8h00	9h00	Registration
	9h00	10h00	<b>Keynote speaker</b> <b>Beth Fulton:</b> « What's easy and hard about modelling socioecological systems »
	Room Mérienne		
	10h00	10h30	Coffee break
	10h30	12h30	Parallel sessions 2
	12h30	14h00	Lunch
	14h00	15h40	Parallel sessions 3
	15h40	16h00	Coffee break
	16h00	17h40	Parallel sessions 4
	17h45	18h45	Young researchers workshop
	Room 1		
18h45	20h30	Poster session & Wine and cheese tasting	



## PROGRAMME OF THE WEEK (Part 2)

WEDNESDAY June 01	8h30	9h00	Registration
	9h00	10h00	<b>Keynote speaker</b>
	Room Mériidienne		<b>Linwood Pendleton:</b> « Indicators, indices, and essential variables: Oh my! A decidedly non-statistical take »
	10h00	10h30	Coffee break
	10h30	12h30	Parallel sessions 5
	12h30	13h30	Lunch
	13h30	15h30	Parallel sessions 6
	15h30	16h00	Coffee break
	16h00	17h40	Parallel sessions 7
	17h40	18h40	Young Researchers workshop
	Room 1		
	19h30	23h00	Symposium Dinner
Oceanopolis		Buses depart from le Quartz at 19h30 & 19h45	
THURSDAY June 02	8h30	9h00	Registration
	9h00	10h00	<b>Keynote speaker</b>
	Room Mériidienne		<b>Edward Hugh Allison:</b> « Adventures in Integration: Unexpected Insights for Coastal and Marine Governance from Interdisciplinary Assessments »
	10h00	10h30	Coffee break
	10h30	12h30	Parallel sessions 8
	12h30	14h00	Lunch
	14h00	16h00	Parallel sessions 9
	16h00	16h30	Coffee break
	16h30	17h30	<b>Keynote speaker</b>
	Room Mériidienne		<b>Simon Levin:</b> « Dealing with public goods and common-pool resources in marine ecosystems »
	17h30	18h30	Young Researchers workshop
Room 1			
FRIDAY June 03	8h30	9h00	Registration
	9h00	10h00	<b>Keynote speaker</b>
	Room Mériidienne		<b>Anthony Charles:</b> « Assessing and managing a multi-sectoral multi-objective ocean: Challenges for integration and participation »
	10h00	10h30	Coffee break
	10h30	12h00	Closing session
	Room Mériidienne		
	12h00	13h00	Strawberries & wine



## INTRODUCTIVE TALK 1 & 2

Introductory talks 1		Monday 30/05 - 11h >12h	Room Méridienne	
<b>Chair : David Smith</b>				
11h-11h20	The Future of the Ocean Economy project is the first endeavour by the OECD to consider the ocean from an economic perspective.	<b>Torgeir Edvardsen</b>	OECD	
11h20-11h40	Marine Ecosystems and the Growing Ocean Economy: Challenges and Opportunities for Sustainable Development and Science	<b>Paul Holthus</b>	World Ocean Council	
11h40-12h	The North Sea Case. Sea Bottom Protection (Natura 2000 and EMFD) Fishing Industry Stakeholder Involvement	<b>Pim Visser</b>	European Association of Fish Producers Organisations (EAPO)	
Introductory talks 2		Monday 30/05 - 14h >15h	Room Méridienne	
<b>Chair : Jason Link</b>				
14h-14h20	Understanding and managing marine socio-ecological systems: challenges and prospects from the French Marine Protected Areas Agency point of view	<b>François Gauthiez</b>	French Marine Protected Area Agency	
14h20-14h40	Making the Ecosystem Approach Operational	<b>Mark Dickey-Collas</b>	ICES, Denmark	
14h40-15h	How can natural science and social science research be integrated into science advice so that it is useful to policy makers and the broader society?	<b>Alida Bundy</b>	Bedford Institute of Oceanography, Canada	





## KEYNOTE SPEAKERS

PROGRAMME OF KEYNOTE SPEAKERS			Room Méridienne	
<b>Monday May, 30</b>	9h30-10h30	Fisheries from biological clockworks to socio-ecological systems and ecosystems services	<b>Serge Garcia</b>	Chair, Fisheries Expert Group, IUCN Commission on Ecosystem Management, Italy
	13h00-14h00	Fisheries Governance in an SES system: All Things for All People or All Things for All Creatures?	<b>Jake Rice</b>	Chief Scientist Emeritus, Fisheries and Oceans, Canada
<b>Tuesday May, 31</b>	9h00-10h00	What's easy and hard about modelling socioecological systems	<b>Beth Fulton</b>	Senior researcher, CSIRO, Australia
<b>Wed. June, 01</b>	9h00-10h00	Indicators, indices, and essential variables: Oh my! A decidedly non-statistical take	<b>Linwood Pendleton</b>	Senior researcher, UMR AMURE, IUEM, UBO, France
<b>Thursday June, 02</b>	9h00-10h00	Adventures in Integration: Unexpected Insights for Coastal and Marine Governance from Interdisciplinary Assessments	<b>Edward Hugh Allison</b>	Professor, School of Marine and Environmental Affairs, USA
	16h30-17h30	Dealing with public goods and common-pool resources in marine ecosystems	<b>Simon Levin</b>	Professor, Princeton University, USA
<b>Friday June, 03</b>	9h00-10h00	Assessing and managing a multi-sectoral multi-objective ocean: Challenges for integration and participation	<b>Anthony Charles</b>	Professor, Saint Mary's University, Canada



# PROGRAMME OF THEME SESSIONS





## PARALLEL SESSIONS – Synthesis by ID Number

Parallel sessions 1 - Monday 30/05 - 15h45>17h45				
Theme session	B-1	C-1	D-1	E-1
Room	Merid.	Room 1	Room 3/4	Room 2
15H45-16h05	93	209	111	242
16h05-16h25	99	218	151	38
16h25-16h45	174	234	179	91
16h45-17h05	194	70	215	244
17h05-17h25	237	68	229	64
17h25-17h45	182			166

Parallel sessions 2 - Tuesday 31/05 - 10h30>12h30				
Theme session	A-1	B-2	D-2	E-2
Room	Room 1	Merid.	Room 3/4	Room 2
10H30-10h50	221	86	26	103
10h50-11h10	52	249	75	107
11h10-11h30	62	184	90	73
11h30-11h50	115		97	47
11h50-12h10	235		231	56
12h10-12h30	37		232	

Parallel sessions 3 - Tuesday 31/05 - 14h>15h40				
Theme session	E-3	F-1	B-3	C-2
Room	Room 2	Room 3/4	Merid.	Room 1
14H00-14h20	59	F-C 101	12	42
14h20-14h40	217	35	152	50
14h40-15h00	246	80	157	147
15h00-15h20	256	82	163	168
15h20-15h40			43	192

Parallel sessions 4 - Tuesday 31/05 - 16h >17h40				
Theme session	A-2	B-4	D-3	F-2
Room	Room 2	Merid.	Room 3/4	Room 1
16H00-16h20	180	77	238	186
16h20-16h40	118	84	65	112
16h40-17h00	121	100	106	F-C 116
17h00-17h20		20	110	
17h20-17h40		223	123	



Parallel sessions 5 - Wed. 01/06 - 10h30>12h30				
Theme session	C-3	D-4	E-4	F-3
Room	Merid.	Room 3/4	Room 2	Room 1
10H30-10h50	141	124	201	183
10h50-11h10	66	134	146	130
11h10-11h30	120	145	126	40
11h30-11h50	127	148	104	197
11h50-12h10	178	222	119	
12h10-12h30	198			

Parallel sessions 6 - Wed. 01/06 - 13h30 >15h30				
Theme session	B-5	C-4	E-5	F-4
Room	Merid.	Room 3/4	Room 2	Room 1
13H30-13h50	131	21	205	212
13h50-14h10	67	29	109	239
14h10-14h30	210	83	125	160
14h30-14h50	132	113	33	162
14h50-15h10				
15h10-15h30				

Parallel sessions 7 - Wed. 01/06 - 16h >17h40				
Theme session	B-6	C-5	E-6	F-5
Room	Merid.	Room 3/4	Room 2	Room 1
16H00-16h20	30	167	138	51
16h20-16h40	22	187	172	F-C 129
16h40-17h00	159	206	195	133
17h00-17h20			252	55
17h20-17h40				

Parallel sessions 8 - Thursday 02/06 - 10h30>12h30				
Theme session	B-7	C-6	D-5	F-6
Room	Merid.	Room 3/4	Room 2	Room 1
10H30-10h50	25	236	60	219
10h50-11h10	44	250	63	208
11h10-11h30	53	241	74	220
11h30-11h50	199	34	85	165
11h50-12h10	128	39	137	
12h10-12h30		41		

Parallel sessions 9 - Thursday 02/06 - 14h00>16h00				
Theme session	C-7	D-6		
Room	Merid.	Room 2		
14H00-14h20	243	214		
14h20-14h40	89	153		
14h40-15h00	114	224		
15h00-15h20				
15h20-15h40				
15h40 - 16h00				



## THEME A - Identifying needs for managing multiple ocean use sectors – policy, management and industry needs

Parallel sessions 2		Tuesday 31/05 - 10h30>12h30	Room 1	
Chair : Jake Rice				
Theme A-1	ID		First author	Institute
10H30-10h50	221	Transitioning to a brave new world : the need for, and challenge of, interdisciplinary research.	Stewart Frusher	University of Tasmania
10h50-11h10	52	Re-inventing environmental impact assessment with a systems-based approach	Jennifer Coston-Guarini	LimOce Environmental Consulting, Ltd.
11h10-11h30	62	Connectivity of policies, sectors and stakeholders in the marine environment: a network approach	Leonie A Robinson	University of Liverpool
11h30-11h50	115	Spatial and temporal potentials and limitations for the integration and management of fisheries, aquaculture and other activities in the coastal areas – the ECOAST project	Erik Olsen	Institute of Marine Research
11h50-12h10	235	Sustainable fisheries in a social-minded world: challenges and perspectives from a seafood certification perspective	Catherine Longo	Marine Stewardship Council
12h10-12h30	37	A comparison of marine spatial planning approaches in China: Marine functional zoning and the marine ecological red line	Jie Liu	National Marine Data and Information Service



**THEME A - Identifying needs for managing multiple ocean use sectors – policy, management and industry needs**

Parallel sessions 4		Tuesday 31/05 - 16h >17h40	Room 2	
Chair : Cristina Pita				
Theme A-2	ID		First author	Institute
16H00-16h20	180	Marine Environmental Values as the basis for ecosystem based management within the Australian EEZ.	Piers K Dunstan	CSIRO Oceans and Atmosphere
16h20-16h40	118	Understanding Integration Challenges in Maritime Spatial Planning	Andreas Kannen	Helmholtz-Zentrum Geesthacht, Institute for Coastal Research
16h40-17h00	121	Does the use of ecosystem services concepts support local stakeholder participation and improve the marine spatial planning process?	Beth E. Scott	University of Aberdeen
17h00-17h20	221	Transitioning to a brave new world: the need for, and challenge of, interdisciplinary research.	Stewart Frusher	University of Tasmania
17h20-17h40		Open discussion		

Poster				
Theme A	ID		First author	Institute
	230	Using a compensation framework on coastal structures to balance natural resource protection with private property rights and needs: A policy for Connecticut's Long Island Sound coastline	Ian Yue	Department of Energy & Environmental Protection, Office of Long Island Sound Programs
	92	The role of cephalopods in ecosystem and the implications for fisheries management and ecosystem conservation.	Thibaut de la Chesnais	CSIRO



**THEME B - Coupled ecological, economic and social process understanding of the drivers of change: methods and tools for scenario development and prediction**

Parallel sessions 1		Monday 30/05 - 15h45>17h45	ROOM Méridienne	
Chair : Keith Criddle				
Theme	B-1		First Author	Institute
15H45-16h05	93	Ecosystem functioning modifications due to the climate change and possible socio-economic implications	Fabio Pranovi	Università ca' Foscari di Venezia
16h05-16h25	99	Mitigating eutrophication of the Baltic Sea by steering people's food consumption	Eva-Lotta Sundblad	The Swedish Institute for the Marine Environment
16h25-16h45	174	Linking watershed processes to coastal fisheries: ecological and economic effects of nutrient enrichment on the Gulf of Mexico shrimp fishery	J. Kevin Craig	NOAA National Marine Fisheries Service Southeast Fisheries Science Center
16h45-17h05	194	Assessing climate change impacts on the small pelagics fishery from the southern Benguela system	Kelly Ortega-Cisneros	Rhodes University
17h05-17h25	237	Review of current and future harvest policies for use in projecting climate change impacts on fish and fisheries; a framework for developing Representative Fishery Pathways.	Anne B. Hollowed	Alaska Fisheries Science Center
17h25-17h45	182	Ecosystem-based fisheries management procedures for the Northeast US: coupling ecological and economic models to quantify societal and ecological tradeoffs	Gavin Fay / Speaker : Jason Link	University of Massachusetts Dartmouth
Parallel sessions 2		Tuesday 31/05 - 10h30>12h30	ROOM Méridienne	
Chair : Luc Doyen				
Theme	B-2		First Author	Institute
10H30-10h50	86	The dynamics of fishing fleets when faced with the aquaculture dilemma	Andreea Laura Cojocar	University of Stavanger
10h50-11h10	196	Marine protected Areas. A dangerous management tool, the case of the Juan Fernández ecosystem.	Javier Porobic	CSIRO - University of Tasmania
11h30-11h50	249	Impact of human and climatic drivers over fishing patterns dynamics in a marine protected area: the galapagos Marine Reserve	Mauricio Castrejón	Dalhousie University, Canada
11h50-12h30	184	Utilizing the spatial economics toolbox for fisheries to model the economic impacts of fisheries management actions and environmental change	Alan C. Haynie	NOAA Fisheries Alaska Fisheries Science Center
11h50-12h30		Open discussion		



## THEME B - Coupled ecological, economic and social process understanding of the drivers of change: methods and tools for scenario development and prediction

Parallel sessions 3		Tuesday 31/05 - 14h>15h40	ROOM Méridienne	
Chair : Jan Jaap Poos				
Theme	B-3		First Author	Institute
14H00-14h20	12	The eco <sup>2</sup> model – a basic bio-economic module describing the dynamics of the cohort biomass to exploitation.	Eckhard Bethke	Thünen Institute of Sea Fisheries
14h20-14h40	152	A bio-economic agent-based model to investigate trade-offs in quota governance systems in fisheries	Claire Macher	Ifremer / UMR AMURE
14h40-15h00	157	A Bioeconomic modeling of Sardinella fisheries in Senegal	Aliou BA	IRD/CRODT/UCAD
15h00-15h20	163	Understanding the interplay of fishing selectivity and economic drivers for resilience and collapse of an unregulated fishery	Anna-Marie Winter	Centre for Ecological and Evolutionary Synthesis (CEES)
15h20-15h40	43	High-grading and over-quota discarding in mixed fisheries	Jurgen Batsleer	Visned

Parallel sessions 4		Tuesday 31/05 - 16h >17h40	ROOM Méridienne	
Chair : Olivier Thébaud				
Theme	B-4		First Author	Institute
16H00-16h20	77	Exploring socio-ecological models of fishery management using multi-agent social simulation	Samaneh Heidari	Utrecht University
16h20-16h40	84	Bio-economic model-based scenarios for the management of the shrimp fishery in French Guiana facing global change	Fabian Blanchard	Ifremer
16h40-17h00	100	Towards an effective social-ecological approach of fisheries management in coral reefs	Dubois Mélodie	CRIOBE, USR 3278 CNRS-EPHE-UPVD
17h00-17h20	20	Exploring socio-ecological systems with Bayesian belief networks: Examples from the Pacific and Southern North Sea	Dr. Vanessa Stelzenmüller	Thünen-Institute of Sea Fisheries
17h20-17h40	223	Quantitative analysis methods to explore relationships between recreational uses and biodiversity in a Marine Protected Area network context: Case study of New-Caledonian lagoon.	Gonson Charles	Ifremer / IRD





**THEME B - Coupled ecological, economic and social process understanding of the drivers of change: methods and tools for scenario development and prediction**

Parallel sessions 6		Wednesday 01/06 - 13h30 >15h30	ROOM Méridienne	
Chair : Doug Lipton				
Theme	B-5		First Author	Institute
13H30-13h50	131	A new conceptual framework to investigate social-transformations of marine social-ecological systems	Sebastian Villasante	University of Santiago de Compostela
13h50-14h10	67	Coupling of socio-ecological systems from the supply side: exploring inter-relationships between ecosystem state and capacity to support services	Fiona Culhane	University of Liverpool
14h10-14h30	210	Transitioning through the looking-glass in natural resource management	Eva Plaganyi/Speaker : Ingrid Van Putten	CSIRO
14h30-14h50	132	Complex and interconnected drivers in marine social-ecological systems: local evidence of social transformations in European fisheries	Sebastian Villasante	University Santiago de Compostela
14h50-15h10	251	Finding Behavioral Solutions to IUU Fishing.	Willow Battista	Environmental Defense Fund
15h10-15h30		Open discussion		

Parallel sessions 7		Wednesday 01/06 - 16h >17h40	ROOM Méridienne	
Chair : Luc Doyen				
Theme	B-6		First Author	Institute
16H00-16h20	30	La Machine Infernale—How the Interplay of Social, Ecological, and Environmental Factors Influences the Observability and Controllability of Fishery Social Ecological Systems	Keith R. Criddle	University of Alaska
16h20-16h40	22	Overview of the Marine Ecosystem Health and Human Well-being (MarWeb) project	Grant Murray	Duke University Marine Lab
16h40-17h00	159	Disentangling seafood value chains: tourism and the local market driving small-scale fisheries in São Vicente, Cape Verde (West Africa)	João Garcia Rodrigues	University of Santiago de Compostela, Campus Do Mar
17h00-17h20		Open discussion		
17h20-17h40				



## THEME B - Coupled ecological, economic and social process understanding of the drivers of change: methods and tools for scenario development and prediction

Parallel sessions 8		Thursday 02/06 - 10h30>12h30	ROOM Méridienne	
Chair : Keith Criddle				
Theme	B-7		First Author	Institute
10H30-10h50	25	Changes in fishing behaviour of two fleets under fully documented catch quota management: same rules, different outcomes.	Edwin van Helmond	IMARES Wageningen UR
10h50-11h10	44	Mixed fisheries management: Is the ban on discarding likely to promote more selective and fuel efficient fishing in the Dutch flatfish fishery?	Jan Jaap Poos	IMARES
11h10-11h30	53	Development of a new agent-based model for the exploration of fisheries management approaches; incorporating fisher behaviours	Michael Drexler	Ocean Conservancy
11h30-11h50	199	Towards a better understanding of fisheries behaviour	Marloes Kraan	IMARES
11h50-12h10	128	An Agent Based Model of the South African Offshore Hake Trawl Fishery that Examines the Relative Importance of Drivers	Rachel Cooper	University of Cape Town
12h10-12h30		Open discussion		

**THEME C - From data to indicators to reference points and performance evaluation**

Parallel sessions 1		Monday 30/05 - 15h45>17h45	Room 1	
Chair : Jörn Schmidt				
Theme	C-1		First author	Institute
15H45-16h05	209	Purse seine tuna fisheries in the South Pacific: Mapping the distribution of their benefits around the globe	Evangelia Drakou	Université de Bretagne Occidentale, Institut Universitaire Européen de la Mer
16h05-16h25	218	Single species vs multispecies management when economic objectives are in place and transitional period considered.	Raúl Pallezo	AZTI
16h25-16h45	234	Management and mixed fisheries	Vermard Youen	Ifremer
16h45-17h05	70	Dimension of Human impact in the protection of the marine environment : case of guard cap area in east algerian territory	Seridi Amal	Université Badji Mokhtar-Annaba, Algerie
17h05-17h25	68	Scaling up a global tool for fisheries improvement: adding economic and social dimensions to FishSource.com	Sébastien Metz	Sakana Consultants

Parallel sessions 3		Tuesday 31/05 - 14h>15h40	Room 1	
Chair : Jörn Schmidt				
Theme	C-2		First author	Institute
14H00-14h20	42	Indicator decision tree for managing fisheries	Sigrid Lehuta	Ifremer
14h20-14h40	50	Optimal biodiversity loss in multispecies fisheries	Eric Tromeur	Institute of Ecology and Environmental Sciences
14h40-15h00	147	The information value of full-retention policies: An analysis of the North Sea demersal fishery	Rolf Groeneveld	Wageningen University
15h00-15h20	168	Understanding the effects of catch share programs: Insights into social vulnerability and fishing participation in the Bering Sea and Aleutian Islands crab fisheries	Amber Himes-Cornell	Université de Bretagne Occidentale / UMR AMURE
15h20-15h40	192	Optimal harvesting of a highly depleted stock: The Case of the Ibero-Atlantic Sardine Fishery	Renato Rosa	CENSE, Faculdade de Ciências e Tecnologia, Universidade Nova de Lisboa



## THEME C - From data to indicators to reference points and performance evaluation

Parallel sessions 5		Wednesday 01/06 - 10h30>12h30		ROOM Méridienne	
Chair : Jason Link					
Theme	C-3		First author	Institute	
10H30-10h50	141	Multiple management objectives: how to strike a bargain?	Sophie Gourguet	Ifremer / UMR AMURE	
10h50-11h10	66	Ecoviability for Ecosystem Based Fisheries Management	Luc Doyen	CNRS GREThA	
11h10-11h30	120	Social tipping points and environmental management decision-making: a biodiversity offsets example	Olivier THEBAUD	Ifremer / UMR AMURE	
11h30-11h50	127	Co-viability in fisheries management, an example framework from the Southern Benguela	Rachel Cooper	University of Cape Town	
11h50-12h10	178	Effects of European multi-annual management plans: a viability approach	Abdoul Ahad Cissé	University of Bordeaux	
12h10-12h30	198	Strengthening the resilience of small-scale 2 fisheries: a modelling approach to explore the 3 use of in-shore pelagic resources in Melanesia	Pierre-Yves Hardy	INRA	

Parallel sessions 6		Wednesday 01/06 - 13h30 >15h30		ROOM 3/4	
Chair : Olivier Thébaud					
Theme	C-4		First author	Institute	
13H30-13h50	21	Ocean productivity index as a decision tool for Maritime Spatial Planning	Druon Jean-Noel	European Commission – Joint Research Centre, Maritime Affairs Unit	
13h50-14h10	29	Trends in time series observations of human dimension indicator data for the North Pacific ecosystem	Keith R. Criddle	University of Alaska Fairbanks	
14h10-14h30	83	NOAA's approach to Integrated Ecosystem Assessments: A framework and tool to support ecosystem-based approaches to management in socio-ecological systems	Rebecca Shuford	NOAA	
14h50-15h10	113	International comparison of Human Well-being structures and factors: A study of the PICES 6 countries	Juri Hori	Rikkyo University	
15h10-15h30		Open discussion			

**THEME C - From data to indicators to reference points and performance evaluation**

Parallel sessions 7		Wednesday 01/06 - 16h >17h40	ROOM 3/4	
Chair : Jan Jap Poos				
Theme	C-5		First author	Institute
16H00-16h20	167	Vulnerability of the habitats potential to deliver ecosystem Services in Peniche-Nazaré, Portugal	Ana Isabel Lillebø	University of Aveiro
16h20-16h40	187	A framework for practical integration of ecological, economic, social and institutional aspects in integrated management	Robert Stephenson	Canadian Fisheries Reserach Network
16h40-17h00	206	Integrating environmental, climatic and human processes on a Mediterranean semi-enclosed embayment (Amvrakikos Gulf, Greece): a food-web modelling approach for assessing ecosystem status	Simone Libralato	Istituto Nazionale di Oceanografia e di Geofisica Sperimentale – OGS
17h00-17h20		Open discussion		
17h20-17h40				

Parallel sessions 8		Thursday 02/06 - 10h30>12h30	ROOM 3/4	
Chair : Luc Doyen				
Theme	C-6		First author	Institute
10H30-10h50	41	<b>It is all about the 'T' – Trajectories of Icelandic fishing villages in times of transferable quotas</b>	<b>Matthias Kokorsch</b>	<b>University of Iceland</b>
10h50-11h10	250	Ecosystem Risk Assessment using the Comprehensive Assessment of Risk to Ecosystems (CARE) Tool	Willow Battista	Environmental Defense Fund
11h10-11h30	241	What are we managing for: Values and the Management of Marine Social-Ecological Systems	Grant D Murray	Duke University Marine Lab
11h30-11h50	34	Using Socio-Economic and Fisheries Involvement Indices to Understanheinrid Alaska Fishing Community Well-Being	Stephen Kasperski	NOAA Fisheries, Alaska Fisheries Science Center
11h50-12h10	39	Social Indicators of Fishing Community Vulnerability and Resilience in the United States: An Emergent Method to Assess the Impacts of Changing Fisheries Management and Climate Conditions	Lisa L. Colburn	NOAA Fisheries
12h10-12h30	236	Reaching for integrative bio-monitoring tools to assess chronic chemical contamination in the coastal environment	Marine Breitwieser	LIENSs

**THEME C - From data to indicators to reference points and performance evaluation**

Parallel sessions 9		Thursday 02/06 - 14h00>16h00	ROOM Méridienne	
Chair : Jan Jaap Poos				
Theme	C-7		First author	Institute
14H00-14h20	243	A scientist and stakeholder partnership for developing fisheries management plans: DAMARA	Simon Mardle	Fishor Consulting
14h20-14h40	89	Linking ecosystem processes to communities of practice through commercially fished species in the Gulf of Alaska	Stephani Zador	Alaska Fisheries Science Center, NMFS, NOAA
14h40-15h00	114	Social data for integrated assessment under the future European Data Collection Multi Annual Programmes	Leyre Goti	Thünen Institute of Sea Fisheries
15h00-15h20		Open discussion		
15h20-15h40				

Poster				
Theme C	ID		First author	Institute
	45	MeRamo – An assimilative biogeochemical model system for the support of public authorities dealing with the Marine Strategy Framework Directive	Ina Lorkowski	Federal Maritime and Hydrographic Agency, Germany
	105	Indicators to evaluate the sustainability of snapper and grouper fisheries	Patrícia Alexandra da Silva Amorim	Universidade dos Açores / MARE Centro de Ciências do Mar e do Ambiente, Portugal
	228	Application of the DPSIR framework as tool for coastal and marine monitoring related to management of a potential impacted area of Adriatic sea (Mediterranean sea)	Pulcini Marina	ISPRA, Italy

**THEME D - Participatory assessment processes: opportunities and challenges**

Parallel sessions 1		Monday 30/05 - 15h45>17h45	ROOM 3/4	
Chair : Stewart Frusher				
Theme	D-1		First author	Institute
15H45-16h05	111	Cognitive, abundance and closed area maps: a stakeholder centered approach to management advice in the Irish Sea ray fishery	David G. Reid	Marine Institute
16h05-16h25	151	Participative methods for a better understanding of moored fish aggregating devices (MFADs)	Olivier Guyader	Ifremer / UMR AMURE
16h25-16h45	179	Participatory modelling of ocean warming and acidification impacts on a subarctic marine system	Stefan Koenigstein	Sustainability Research Centre (artec)
16h45-17h05	215	Integrating socio-economic drivers in an explicit-time, qualitative fisheries model: EcoMata	Christine Largouet	Agrocampus / UMR IRISA
17h05-17h25	229	Lessons from a multi-model participatory approach for the evaluation of discard reduction scenarios in the Eastern English Channel	Sigrid Lehuta	Ifremer
17h25-17h45		Open discussion		

Parallel sessions 2		Tuesday 31/05 - 10h30>12h30	ROOM 3/4	
Chair : Stewart Frusher				
Theme	D-2		First author	Institute
10H30-10h50	26	The «Territory game»: a traceability of drivers and actions' design on the maritime integrated management in the southwestern Pacific	Anne Littaye	GIZ/CIM
10h50-11h10	75	Understanding the behavior of policy decision makers through participatory experiments, a role playing game to explore management of the Atlantic Bluefin tuna fishery.	Selles Jules	Ifremer, Université de Nantes
11h10-11h30	90	Informing ecosystem-based management of the range extending long- spined sea urchin using a structured decision making process	Martin P. Marzloff	Institute for Marine and Antarctic Studies, University of Tasmania
11h30-11h50	97	A learning experiment for integrated assessment of the sensitivity of North Sea living marine resources to climate change	Christian Möllmann	Institute for Hydrobiology and Fisheries Science, University of Hamburg
11h50-12h10	231	Improving the governability of small-scale fisheries: the need for fisheries action research	Marc Léopold	IRD (Institut de Recherche pour le Développement)
12h10-12h30	232	How implement a management plan measures for shark stocks? Four complementary tools to help policy-makers	Cécile Brigaudeau	Des Requins et des Hommes



## THEME D - Participatory assessment processes: opportunities and challenges

Parallel sessions 4		Tuesday 31/05 - 16h >17h40	ROOM 3/4	
Chair : Denis Bailly				
Theme	D-3		First author	Institute
16H00-16h20	238	Science - industry collaboration on the Eastern English Channel common sole stock	Marie Savina	IFREMER
16h20-16h40	65	Social-ecological systems in practice – understanding the potential for use in UK marine policy and management	Kieran Hyder	Centre for Environment, Fisheries & Aquaculture Science (Cefas)
16h40-17h00	106	The end of the comfort zone: Co-creation for implementing the Ecosystem Approach to Fisheries Management in the European Union.	Marta Ballesteros	Centro Tecnológico del Mar-Fundación CETMAR
17h00-17h20	110	Marine Ecosystem Health and Human Well-Being (PICES-MarWeb)-A good relationship between local communities and seafood diversity.	Hirota Masahito	National Research Institute of Fisheries Science, Fisheries Research Agency
17h20-17h40	123	Developing strategies for Seagrass Conservation: a focus on food security provision	Benjamin Jones	Cardiff University

Parallel sessions 5		Wednesday 01/06 - 10h30>12h30	ROOM 3/4	
Chair : Cristina Pita				
Theme	D-4		First author	Institute
10H30-10h50	124	Ecosystem Services as integrating element in Integrated Ecosystem Assessments?	Kira Gee	Helmholtz-Zentrum Geesthacht
10h50-11h10	134	The SYNOPSIS platforms: tools for integration and sharing of knowledge in support of sustainable environmental management	Johanna Ballé-Béganton	Université de Bretagne Occidentale / UMR AMURE
11h10-11h30	145	Assessing the role of perceptions in social conflict among natural resource users: the case of shark provisioning in French Polynesia	Pierpaolo Brena	CRIOBE USR3278
11h30-11h50	148	Stakeholders' Perceptions on the Marine and Coastal Ecosystem Services at Peniche-Nazaré	Tom Willaers	NOVA SBE
11h50-12h10	222	Marine coastal communities: ecosystems of human change	Stewart Frusher	Institute for Marine and Antarctic Studies
12h10-12h30		Open discussion		







## THEME D - Participatory assessment processes: opportunities and challenges

Parallel sessions 8		Thursday 02/06 - 10h30>12h30	ROOM 2	
Chair : Denis Bailly				
Theme	D-5		First author	Institute
10H30-10h50	60	Strategies and tools for visioning alternative futures for marine ecosystems and coastal communities	Jeffrey Dambacher	CSIRO
10h50-11h10	63	Weighing up management options for marine ecosystems: a participatory approach	Leonie A Robinson	Univeristy of Liverpool
11h10-11h30	74	Mental models, computer models and attitudes towards the Future	Fabio Boschetti	CSIRO
11h30-11h50	85	Beyond the Soft System Methodology	Michel Lample	Université de Bretagne Occidentale / UMR AMURE
11h50-12h10	137	The System Approach Framework as a new protocol for the integration of science and society in coastal and marine socio-ecosystems	José Antonio Pérez Agúndez	Ifremer/ UMR AMURE
12h10-12h30		Open discussion		

Parallel sessions 9		Thursday 02/06 - 14h00>16h00	ROOM 2	
Chair : Tony Smith				
Theme	D-6		First author	Institute
14H00-14h20	214	INFORMD: an environmental decision support tool for coastal salmon aquaculture in Tasmania, Australia	Rich Little	CSIRO
14h20-14h40	153	Developing operational bio-economic decision-support tools with stakeholders to help in multi-annual plan design: challenges and opportunities	Claire Macher	Ifremer / UMR AMURE
14h40-15h00	224	ELFSim: a fisheries decision support tool for cOralreef line fish on the Great Barrier Reef of Australia	Rich Little	CSIRO
15h00-15h20		Open discussion		
15h20-16h00				

**THEME E - Governance and institutional frameworks**

Parallel sessions 1		Monday 30/05 - 15h45>17h45	ROOM 2	
Chair : Annie Cudennec				
Theme	E-1		First author	Institute
15H45-16h05	242	What makes the Ecosystem Approach work in natural resource management – or not	Tony Smith	CSIRO Oceans and Atmosphere
16h05-16h25	38	Trust, confidence and equity affect the legitimacy of natural resource governance	Rachel Turner	Environment and Sustainability Institute, University of Exeter
16h25-16h45	91	Tidying up the knot: science-policy-society interfaces for the implementation of the Ecosystem Approach to Fisheries Management (EAFM) in the European Union (EU).	Paulina Ramirez-Monsalve	Innovative Fisheries Management (IFM), Aalborg University Research Centre
16h45-17h05	244	Advancing Integrated Approaches to Marine Ecosystem Management through Multi-Stakeholder Engagement	Cathal O'Mahony / Speaker : Dr. Tim O'Higgins	University College Cork
17h05-17h25	64	EU Integrated Maritime Policy and Data Sharing – a Legal Approach	Betty Queffelec	Université de Bretagne Occidentale / UMR AMURE
17h25-17h45	166	Cooperation in planning the EU regional seas: lessons learned in the development of a marine planning resource and network for the North Sea	Anne-Michelle Slater	University of Aberdeen



## THEME E - Governance and institutional frameworks

Parallel sessions 2		Tuesday 31/05 - 10h30>12h30	ROOM 2	
Chair : Marloes Kraan				
Theme	E-2		First author	Institute
10H30-10h50	103	Political overfishing: Social-economic drivers challenge sustainability goals	Rudi Voss	Department of economics, Kiel University
10h50-11h10	107	A Team Effort to Tackle a Complex Problem. The Landing obligation in the North Sea.	John G. Pope/ Charlotte Weber	NRC (Europe) Ltd
11h10-11h30	73	A new meaning of community traditional use right of inshore resources: Case study of Shiraho Village, Okinawa, Japan	Aoi Sugimoto	The University of Tokyo
11h30-11h50	47	Fishers' knowledge as smart fishing compass and management tips	Maria Ching Villanueva	IFREMER
11h50-12h10	56	The Spanish Mediterranean coast guilds: their role in the Integrated Coastal Zone Management	Emmánuel Lizcano	Universidad Nacional de Educación a Distancia (UNED)
12h10-12h30		Open discussion		

Parallel sessions 3		Tuesday 31/05 - 14h>15h40	ROOM 2	
Chair : Stewart Frusher				
Theme	E-3		First author	Institute
14H00-14h20	59	Applying Social-Ecological Systems (SES) analysis to unassessed fisheries in the southeastern United States	Scott Crosson	NOAA SEFSC
14h20-14h40	217	Specificities of marine spatial planning in Tropical Areas	Marie Bonnin	Institut de Recherche pour le Développement
14h40-15h00	246	Which governance for marine biodiversity offset?	Céline Jacob	CREOCEAN - Center for Functional and Evolutionary Ecology (CEFE)
15h00-15h20	256	Practical steps toward integrating economic, social and institutional objectives and indicators in fisheries management	Robert Stephenson	Canadian Fisheries Reserach Network
15h20-15h40		Open discussion		



## THEME E - Governance and institutional frameworks

Parallel sessions 5		Wednesday 01/06 - 10h30>12h30	ROOM 2	
Chair : Jake Rice				
Theme	E-4		First author	Institute
10H30-10h50	201	The IPBES Approach to Multiple Knowledge Systems, Multiple Values Systems, and Why Fisheries Should be Engaged.	Jake Rice	Fisheries and Oceans Canada
10h50-11h10	146	Applying Social Network Analysis to Understand ICES Institutional Frameworks applied to Integrated Ecosystem Assessments	Dorothy J. Dankel, PhD	University of Bergen
11h10-11h30	126	From governance of ecosystems to management of human activities through legislative mechanisms	Roland Cormier	Centre for Materials and Coastal Research, Helmholtz-Zentrum-Geesthacht
11h30-11h50	104	Public participation to Ocean Renewable Energy projects in French law	Nicolas Boillet	Université de Bretagne occidentale IUEM
11h50-12h10	119	The role of the legal and policy framework in facilitating an effective balancing of ecosystem services in decision making in the marine environment in Scotland	Anne-Michelle Slater	University of Aberdeen
12h10-12h20		Open discussion		

Parallel sessions 6		Wednesday 01/06 - 13h30 >15h30	ROOM 2	
Chair : Tony Smith				
Theme	E-5		First author	Institute
13H30-13h50	205	The relationship between governance and fisheries outcomes	Ray Hilborn	University of Washington
13h50-14h10	109	The application of the Kotter change management model (Kotter, 1996) to evaluate the lack of fisher engagement in a recently introduced voluntary fishery improvement scheme in Belgium.	Arne Kinds	Institute for Agricultural and Fisheries Research (ILVO)
14h10-14h30	125	The tragedy of a lack of brown shrimp fisheries management in the North Sea	Brita Trapman	IMARES
14h30-14h50	33	Behavioural Economics may inform improving Institutional Settings in Fisheries Management	Sarah B. M. Kraak	Thünen-Institut für Ostseefischerei
14h50-15h10		Open discussion		



## THEME E - Governance and institutional frameworks

Parallel sessions 7		Wednesday 01/06 - 16h >17h40	ROOM 2	
Chair : Marloes Kraan				
Theme	E-6		First author	Institute
16H00-16h20	138	Participatory governance across scales and purposes. To what extent can inshore fishing communities shape their future?	Carole White	University of East Anflia
16h20-16h40	172	A Fishery Management Index: Factors affecting fisheries management and stock status in major fishing countries	Michael Melnychuk	University of Washington
16h40-17h00	195	The fabric of the sea government: Integrating the political dimension in the studies of the "governance" of social-ecological systems	Mazé Camille	LEMAR - IUEM - Université de Bretagne Occidentale
17h00-17h20	252	A Comprehensive Method for Assessing Marine Resource Governance: Comparative Study of Fisheries Governance in the United States and the European Union	Willow marz	Environmental Defense Fund

Poster				
Theme E	ID		First author	Institute
	257	Future MPA of Gouraya: Assessment and Lessons Learned from the Stakeholders Integration Experience	Amina Bouamour	Ecole Nationale Supérieure des Sciences de la Mer et d'Aménagement du Littoral (ENSSMAL)
	258	Assessing the implementation of the algerian coastal law Case : West localities of Agiers	Nawel Khelil	Ecole Nationale Supérieure des Sciences de la Mer et d'Aménagement du Littoral (ENSSMAL)
	259	Management and development of Protected Marine Areas example: Taza National Park, Jijel	Katia Abbad	Ecole Nationale Supérieure des Sciences de la Mer et d'Aménagement du Littoral (ENSSMAL)

**THEME F - Integration: lessons learned from practical case studies**

Parallel sessions 3		Tuesday 31/05 - 14h>15h40	ROOM 3	
Chair : David C. Smith				
Theme	F-1		First author	Institute
14H00-14h20	F-C 101	Management of marine environments in a changing world	Anders Grimvall	Swedish Institute for the Marine Environment
14h20-14h40	35	An acidic future for Norwegian fisheries? Assessing the socio-economic vulnerability of the Norwegian fishery sector to the threat of ocean acidification	Luise Heinrich	Lund University
14h40-15h00	80	Changing endowments and growth trajectories after a resource crises: Lessons from a small Island economy	Le Floc'h Pascal	Université de Bretagne Occidentale / UMR AMURE
15h00-15h20	82	Circular economy, as a promising new approach and policy to combine environmental constraints and issues of the "Blue Growth" ?	le Gouvello Raphaëla	Université de Bretagne Occidentale / UMR AMURE
15h20-15h40		Open discussion		

Parallel sessions 4		Tuesday 31/05 - 16h >17h40	ROOM 1	
Chair : Doug Lipton				
Theme	F-2		First author	Institute
16H00-16h20	186	How can transdisciplinary methods help us better understand historical community adaptations to environmental change in order to develop culturally specific and participative coastal adaptation policies today?	Céline Surette	Université de Moncton
16h20-16h40	112	Multi-criteria analysis of the Icelandic cod fishery	Sveinn Agnarsson	University of Iceland
16h40-17h00	F-C 116	Mapping marine social science research: A conceptual framework	Rolf Groeneveld	Wageningen University
17h00-17h20		Open discussion		

**THEME F - Integration: lessons learned from practical case studies**

Parallel sessions 5		Wednesday 01/06 - 10h30>12h30	ROOM 1	
Chair : David C. Smith				
Theme	F-3		First author	Institute
10H30-10h50	183	The right bycatch tool for the right problem: how catch shares and incentive programs are being utilized and how they can be improved	Alan C. Haynie	NOAA Fisheries Alaska Fisheries Science Center
10h50-11h10	130	Effects of the EU CFP discard landing obligation analyzed with an ecosystem model in the Gulf of Trieste, Adriatic Sea, Italy	Igor Celic	OGS - National Institute of Oceanography and Experimental Geophysics
11h10-11h30	40	Voices from the shore – Icelandic coastal communities in times of fisheries privatisation	Matthias Kokorsch	University of Iceland
11h30-11h50	197	Does Ecosystem-Based Fisheries Management suit all fisheries? - a case study with Chilean fisheries.	Javier Porobic	CSIRO - University of Tasmania
11h50-12h10		Open discussion		
12h10-12h30				

Parallel sessions 6		Wednesday 01/06 - 13h30 >15h30	ROOM 1	
Chair : Jason Link				
Theme	F-4		First author	Institute
13H30-13h50	212	Integrated management plan proposal for a small-scale mussel growing organization in Chiloe island	Yerko Alejandro Yutronich Briceño	University of Concepción
13h50-14h10	239	Applying socio-economic and ecological criteria in the allocation of fishing opportunities	Griffin Carpenter	New Economics Foundation
14h10-14h30	160	Modelling impacts of offshore wind farms on trophic web: the Courseulles-sur-Mer case study, an example of cumulated impacts	RAOUX Aurore	UNICAEN
14h30-14h50	162	Dynamic simulations of the Seine estuary food web: Towards a holistic and integrated approach of management scenarios on ecosystem functioning	TECCHIO Samuele	UNICAEN
14h50-15h30		Open discussion		



**THEME F - Integration: lessons learned from practical case studies**

Parallel sessions 7		Wednesday 01/06 - 16h >17h40	ROOM 1	
Chair : Jörn Schmidt				
Theme	F-5		First author	Institute
16H00-16h20	51	Economic Integration in the Chesapeake Bay Program, Too Little, Too Late?	Doug Lipton	NOAA Fisheries
16h20-16h40	F-C 129	Are Integrated Ecosystem Assessments doomed from the start?	Dorothy J. Dankel, PhD	University of Bergen
16h40-17h00	133	Fisheries and the operationalization of sustainability	Matilda Valman	Stockholm Resilience Centre
17h00-17h20	55	Modeling to uncover social factors in small scale fisheries: The Bayesian story of many and varied fisheries	Ingrid van Putten	CSIRO
17h20-17h40		Open discussion		

Parallel sessions 8		Thursday 02/06 - 10h30>12h30	ROOM 1	
Chair : Doug Lipton				
Theme	F-6		First author	Institute
10H30-10h50	219	Managing toward the triple bottom line: why qualitative social science is needed for quantitative trade-off analyses.	Phillip Levin	NOAA Fisheries
10h50-11h10	208	Assessing Marine Ecosystem Services to Build an Initial Diagnosis: Feedback from the VALMER Project in the GNB	François Morisseau	Agences des aires marines protégées
11h10-11h30	220	When Resource users' perceptions drive MPA social acceptance : the case of Reunion island natural reserve	Gilbert David	IRD, UMR Espace Dev
11h30-11h50	165	Food-web models and political decision: what could be learned from simulations of cumulated impacts on the Baie of Seine food-web properties?	Niquil Nathalie	UNICAEN
11h50-12h30		Open discussion		

Poster				
Theme F	ID		First author	Institute
	94	Balearic Islands boat seine fisheries: the transparent goby fishery an example of co-management	Beatriz Morales-Nin	IMEDEA CSIC/UIB

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