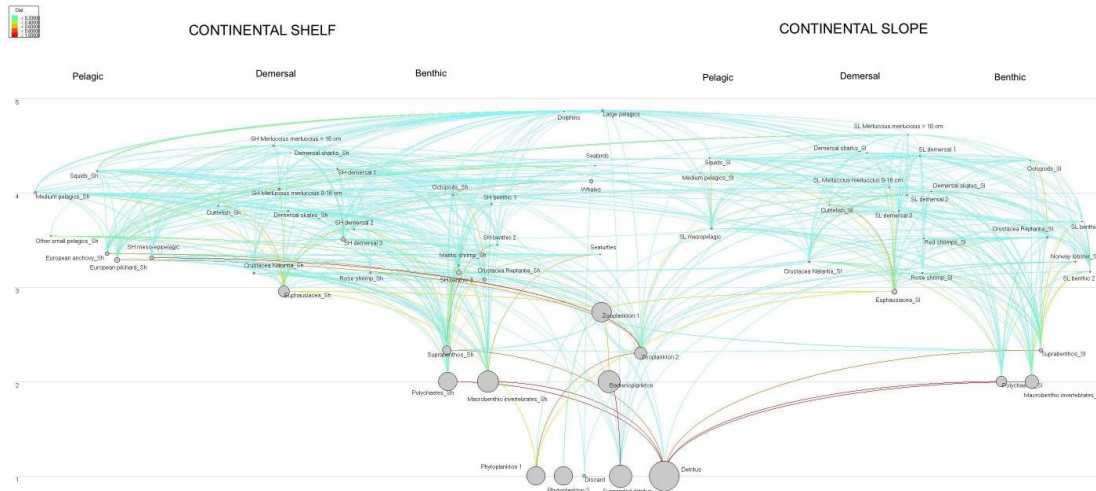


Consiglio Nazionale delle Ricerche  
 ISMAR - Istituto di Scienze Marine  
 U.O.S. di Ancona  
 Largo Fiera della Pesca, 1 – 60125 Ancona, Italy  
 Tel +39 071 207881 Fax +39 071 55313  
 segreteria@an.ismar.cnr.it  
 C.F. 80054330586 - P.IVA 02118311006



Lunedì 16 Marzo 2015

ORE 15:00 SALA RIUNIONI



## SEMINARIO:

*“Potential ecosystem effects of the application of management targets derived from single species assessments: insights from a multispecies-multifleet model”*

**Dott. Simone Libralato**

Ricercatore presso il gruppo di Modellistica Ecologica della Sezione di Oceanografia dell’OGS – Istituto Nazionale di Oceanografia e di Geofisica Sperimentale, Trieste.

Ecosystem approach to fishery requires the representation and analysis of effects of fisheries in a multifactor, multispecies and multifleet context. Nevertheless, fishery management advices are still achieved through the application of single species assessment methods, that might include some external factors but lack representation of interaction with other species. Here we used a food web model representing the central part of the Tyrrhenian Sea to test the potential effects of single species fisheries assessments on ecosystem context. The model describes the ecosystem by means of 62 functional groups (from picophytoplankton to marine mammals) and 4 main fishing fleets operating in the area (trawlers, longlines, purse-seiners and passive nets). This model is used to test the effects of single species assessments by performing scenarios in which fishing mortality for overexploited target species (e.g. hake, red mullet, deep-sea pink shrimp, anchovy) is imposed gradually to the Fmsy resulting from assessments. The results in terms of ecosystem changes (biomasses and indicators) are analysed. Application of MSY for one or more assessed species will be compared also with results obtained by optimizing portfolio of catches in a multispecies context. Results shed light to a complex trade-offs that emerge when performing ecosystem based analyses.

The work is done in collaboration with Laboratorio di Biologia ed Ecologia Marina, Università degli Studi di Roma “La Sapienza”, Roma and with Istituto per l’Ambiente Marino Costiero, Consiglio Nazionale Ricerche (IAMC – CNR), Mazara del Vallo.

SEDE ISTITUTO  
 Arsenale-Tese 104,  
 Castello 2737/F  
 30122 Venezia  
 Tel. +39 041 2407904  
 Fax +39 041 2407940  
 segreteria@ismar.cnr.it

Bologna  
 Via P. Gobetti, 101  
 40129 BO  
 Tel +39 051 6398891  
 Fax +39 051 6398939  
 segreteria@bo.ismar.cnr.it

Genova  
 Via De Marini, 6  
 16149 GE  
 Tel +39 010 64751  
 Fax +39 010 6475400  
 segreteria@ge.ismar.cnr.it

Lesina  
 Via Pola, 4  
 71010 FG  
 Tel +39 0882 992702  
 Fax +39 0882 991352  
 segreteria@fg.ismar.cnr.it

Pozzuolo di Lerici  
 Forte Santa Teresa  
 19032 SP  
 Tel +39 0187 978300  
 Fax +39 0187 970585  
 segreteria@sp.ismar.cnr.it

Trieste  
 Viale Romolo Gessi, 2  
 34123 TS  
 Tel +39 040 305312  
 Fax +39 040 308941  
 segreteria@ts.ismar.cnr.it