

4th International Workshop

13.04 – 15.04.2011

SIZEMIC Workshop: Changing Climate, Physiological Adaptation, Ecosystem Resilience & Body Size Constraints

Host Institution: Institute for Hydrobiology & Fisheries Science,
University of Hamburg, Grosse Elbstrasse 133, Hamburg, Germany

Organisers: Ute Jacob (Institute for Hydrobiology & Fisheries Science, University of
Hamburg, Hamburg, GER), Ulrich Brose (J.F. Blumenbach Institute of Zoology and
Anthropology, Georg-August-University, Göttingen, GER) & Owen Petchey
(University of Sheffield, Sheffield, UK).

OUTLINE

The final SIZEMIC workshop will focus on the underlying size-based principles that influence the ability of ecosystems to cope with a changing climate. Research topics include (i) the cause and effect relationships between physiological adaptation and species response to changing environmental factors, (ii) the fate of complex food webs in a changing climate and (iii) the size structured constraints influencing the structure and function of networks across terrestrial & aquatic systems. The aim of the 4th SIZEMIC Meeting is to focus on how physiological constraints and the structure of ecological communities influences the ability of individuals, communities and ecosystems to cope with environmental change.

THEMES AND KEYNOTE SPEAKERS

Theme 1:

PHYSIOLOGICAL ADAPTATION & FRAGILITY OF ECOLOGICAL NETWORKS

One of the largest uncertainties in predicting the impacts of climate change on ecological networks is the understanding of cause and effects of a species responding differently to shifting environmental conditions. With this theme we will link studies on the constraints of a species physiological performance and the effects on ecosystem structure and functioning.

PLENARY: HANS PÖRTNER (Alfred Wegener Institute, GER)

Theme 2:

CHANGING CLIMATE & COMPLEX FOOD WEBS

Declining trends in biodiversity may disrupt the structure and function of complex food web. Loss of species within these complex food webs will most likely result in the disappearance of functional roles and lead to loss of ecosystem services. With this theme we will bring together scientists working on network structure and stability of complex “real world” food webs, which has increasing relevance for understanding the effects of a changing climate on structure & functioning of food webs and the provision of ecosystem services.

PLENARY: JOSE M. MONTOYA (Institute of Marine Sciences, ICM-SCIC, Barcelona, Spain)

Theme 3:

SIZE-STRUCTURE ACROSS ECOSYSTEMS

With this theme we will bring together scientists working on the importance of size structure in terrestrial, freshwater and marine systems. Each of the speakers will introduce a variety of methods that can be applied to gain an integrated perspective of climate effects on the size structure of ecological communities with the subsequent implications for ecosystem function.

PLENARY: ELISABETH BORER (Oregon State University Corvallis, Oregon, USA)

Theme 4:

SIZEMIC: WHAT WE KNOW & WHERE TO GO – SYNERGIES & GAPS

With this theme we will provide (i) a summary of what has been achieved within the SIZEMIC network, (ii) an opportunity for the working groups funded by SIZEMIC to introduce their final projects and results as well as (iii) provide a springboard for future perspectives on how the grown SIZEMIC community can continue their interdisciplinary research attempts in aquatic and terrestrial ecology to support an ecosystem approach.

PLENARY: JULIA BLANCHARD (Imperial Collage London, UK) & RICHARD LAW (University of York, UK)

PARTICIPATION BY SIZEMIC COMMUNITY

We welcome participants at the workshop to present posters in the themes outlined below in your application to attend the meeting, providing a title and abstract (150 words maximum). Also, participants who do not want to present posters are welcome to participate in the discussions. Talks will be given by keynote and invited speakers to provide a basis for lively discussion.

PROGRAMME and VENUE

Each theme will consist in a keynote address, 3 invited talks, and plenty of time for discussion.

HOW TO ATTEND?

Please provide in the application form:

1. A short CV
2. Why would you like to attend the meeting
3. If you would like to present a poster, please indicate in which theme

Please send your application by email to ute.jacob@uni-hamburg.de **no later than February 01, 2011**. Once applications are processed, we will notify attendees and provide travel and accommodation advice. No registration fee is required. ESF will provide coffee breaks, lunch and wine receptions, however, travel and accommodation should be covered by the attendees. Maximum attendance for the workshop is 75 people.

SIZEMIC CONTACTS

For general enquiries about SIZEMIC, please contact:

Chair of Steering Committee:

Richard Law
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Programme Coordinator:

Julia Blanchard
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Visit the SIZEMIC Programme websites:

www.sizemic.org and www.esf.org/sizemic