



Ocean Dynamics

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Call for papers for a special issue on

Multi-scale modelling of coastal, shelf and global ocean dynamics

Having recourse to grid nesting has been, and still is, a popular method for increasing ocean models' resolution when and where it is needed. However, this is not the only way to achieve this goal. Various techniques for modifying locally the grid resolution are available. For instance, unstructured meshes offer an almost infinite geometrical flexibility. As new methods for widening the range of resolved scales are developing rapidly, time is ripe for comparing their potential with that of more classical nested grid systems. Research progress is also underway for the use of multi-grids, wavelets and other multi-scale decompositions for the numerical solution of dynamical equations but also for the study of results, model evaluation or data assimilation. This is why **Ocean Dynamics** will devote a special issue to this topic.

Articles for this special issue may address numerical issues or present applications. Domains of interest range from estuaries to the global ocean, including coastal regions and shelf seas. Multi-scale modelling of physical, biological, chemical, and sea ice processes as well as air-sea interactions will be welcome. A number of submissions are expected from presentations made at the **8th International Workshop on Unstructured Mesh Numerical Modelling of Coastal, Shelf and Ocean Flows** (16-18 September 2009, Louvain-la-Neuve, Belgium) but other submissions on the topic are equally welcome.

Manuscripts must be submitted **before January 31, 2010**, through Springer's electronic editorial manager system. The cover letter and the front page of every manuscript must clearly mention that the submission is intended for the present special issue with the code **MSM2010** so that it can be directed by the chief-editor to the relevant special-issue editors, who are

Eric Deleersnijder
Université catholique de Louvain
Louvain-la-Neuve, Belgium
eric.deleersnijder@uclouvain.be
<http://www.ericd.be>

Vincent Legat
Université catholique de Louvain
Louvain-la-Neuve, Belgium
vincent.legat@uclouvain.be
<http://perso.uclouvain.be/vincent.legat/>

Pierre Lermusiaux
Massachusetts Institute of Technology
Cambridge, MA, USA
pierrel@mit.edu
<http://web.mit.edu/pierrel/www/>