



**CLIVAR Workshop on
North Atlantic Thermohaline Circulation Variability
13-16 September 2004
Kiel, Germany
Co-Chairs: M. Visbeck and C. Böning**



The Workshop is organized under the auspices of the International CLIVAR Project by the Atlantic Implementation Panel, the Working Group on Ocean Model Development, and the Special Research Programme on the "Dynamics of Thermohaline Circulation Variability" (SFB 460) at Kiel University.

The Workshop intends to bring together expertise from physical oceanographers, geochemists, and ocean and climate modelers, to discuss recent advances and outstanding problems in our understanding of the mechanisms of deep water formation in the subpolar North Atlantic, their relation to large-scale thermohaline circulation (THC) variability and impact on the uptake anthropogenic trace gases, and the future of the THC under changing climate conditions.

Main goals

- 1) To take stock of our understanding and best estimates of the present and future state of the Atlantic Thermohaline Circulation.
- 2) To guide implementation plans by assessing the capabilities and future needs of THC observing and synthesis systems to detect low-frequency changes or trends.

Workshop Organization

The Workshop is comprised of a series of plenary and poster sessions focused on a set of six themes. Five sessions during the first three days will address recent accomplishments and remaining challenges concerning the main aspects of THC variability in the North Atlantic. The final, sixth session is devoted to the discussion of future research needs and scientific programs; a main task for all other sessions will be to provide contributions for this prior to the workshop, with updates during the event.

Discussion of the major accomplishments and remaining challenges of each theme will be initiated through presentations by invited experts. An important part of the program will be the discussion of posters: the authors are asked to submit all contributed papers in the form of posters; all authors, however, will be given the opportunity to present brief introductions during the plenary sessions.

Deadline for Poster submissions: 1 May, 2004

Session themes (Chairpersons)

- 1) THC variability and climate (J.Willebrand, C.Böning)
- 2) THC variability and the carbon cycle (D.Wallace)
- 3) Water mass transformation processes in the North Atlantic (U.Send, C.Mauritzen)
- 4) Characteristics and mechanisms of THC variability in the North Atlantic (A.-M.Treguier, D.Stammer, W.Johns)
- 5) The THC in a changing climate (R.Wood, M.Latif)
- 6) Future programs (M.Visbeck, E.Chassignet)

Local organization and venue

The workshop (oral and poster presentations) will be held in Kiel, Germany, at the Steigenberger Hotel (www.kiel.steigenberger.de), located near the Leibniz-Institut für Meereswissenschaften, IFM-GEOMAR (former Institut für Meereskunde) (5 min walk); for possible breakout working groups, additional meeting rooms will be provided at the IFM-GEOMAR.

The local organization is coordinated by
Lothar Stramma and Sigrun Komander,
IFM-GEOMAR, Kiel (e-mail: naw2004@ifm.uni-kiel.de).
For general information:
<http://www.ifm.uni-kiel.de/allgemein/naw2004.htm>

