

DPG-School on Physics
Supported by the Wilhelm and Else Heraeus-Foundation

Physics of the Ocean

11 – 16 September, 2011, Physikzentrum Bad Honnef, Germany

Martin Visbeck (IFM-GEOMAR, Kiel) & Wolfgang Roether (Bremen University)

The target group of the school are postdocs, graduate students, and advanced master students, from Europe and beyond, who wish to broaden their understanding of the ocean. They should preferably be engaged in a field neighbouring oceanography, such as atmospheric physics/meteorology, hydrology, geophysics, and bio- or geo-sciences, and should have a sufficient knowledge of physics. Physical ocean processes directly affect the global distribution and transports of ocean properties, ranging from mass and temperature to dissolved substances (salt, CO₂, etc.). Ocean processes are of particular relevance for the global and regional climate, and they set the stage for marine element cycling and the marine ecosystem. The school aims to provide a broader view of the ocean system from a physical perspective and of its interaction with the global climate, and with marine biogeochemical and ecological systems.

Lecturers and topics:

Introduction to Large-Scale Oceanography,
Wolfgang Roether (Bremen University)

Introduction to Coastal Dynamics,
Hans Burchard (Leibniz Institute for Baltic Sea Research,
Warnemünde)

Tropical Oceanography,
Peter Brandt (IFM-GEOMAR, Kiel)

Polar Oceanography,
Eberhard Fahrback (Alfred Wegener Institute,
Bremerhaven)

Operational Oceanography,
Bernd Brügge (German Federal Maritime and
Hydrographic Agency, Hamburg)

Global Ocean Observing Systems,
Martin Visbeck (IFM-GEOMAR, Kiel)

Theory of the Southern Ocean Circulation,
Dirk Olbers (Alfred Wegener Institute, Bremerhaven)

Conceptual Models of the Atlantic Overturning,
Anders Levermann (Potsdam University)

Mixing in the Ocean's Interior,
Marcus Dengler (IFM-GEOMAR, Kiel)

Mesoscale Ocean Dynamics and Mixing,
Carsten Eden (University of Hamburg)

Ocean Acoustics,
Olaf Boebel (Alfred Wegener Institute, Bremerhaven)

Seismic Oceanography,
Gerd Krahnemann (IFM-GEOMAR, Kiel)

CO₂ in the Ocean,
Reiner Schlitzer (Alfred Wegener Institute, Bremerhaven)

Ocean Biogeochemistry,
Dieter Wolf-Gladrow (Alfred Wegener Institute,
Bremerhaven)

Biogeochemical Time Series,
Joanna Waniek (Leibniz Institute for Baltic Sea Research,
Warnemünde)

Evening Lecture: Ocean and Climate,
Mojib Latif (IFM-GEOMAR, Kiel)

Fees

Covering full board and lodging at the Physikzentrum Bad Honnef 475 € (for DPG members 375 €),
for students 315 € (for DPG members 215 €), without lodging 210 €.

Application & more information at www.pbh.de

Deutsche Physikalische Gesellschaft

