

DPG – Physics Summer School "Physics of the Ocean"

11. Sept. – 16. Sept. 2011

Physikzentrum Bad Honnef

Supported by the **WILHELM UND ELSE HERAEUS-STIFTUNG**

Sunday, 11. 9.: Arrival, Reception, and Introduction

15.00 – 17.30 Arrival of participants at the Physikzentrum Bad Honnef
17.30 – 18.30 Welcome reception (Visbeck & Roether)
18.30 – 20.00 Dinner
20.00 – 21.30 Introduction to the Summer School and 'Speed Dating'

Monday, 12. 9.: Large Scale and Regional Oceanography

08.00 – 09.00 Breakfast
09.00 – 10.30 Lecture #1: Introduction to Large-Scale Oceanography (Prof. Dr. Wolfgang Roether)
10.30 – 11.00 Coffee break
11.00 – 12.30 Lecture #2 Tropical Oceanography (Prof. Dr. Peter Brandt)
12.30 Lunch
14.00 – 15:30 Lecture #3: Introduction to Coastal Dynamics (Prof. Dr. Hans Burchard)
15.30 – 16:00 Introduction to Super Problems (Visbeck)
16.00 – 16.30 Coffee break
16.30 – 18.00 Exercises / Discussions (posters on display)
18.00 – 20.00 Dinner
20.00 – ... Heraeus evening (welcome party)

Tuesday, 13. 9.: Regional and Operational Oceanography, Observing Methods

08.00 – 09.00 Breakfast
09.00 – 10.30 Lecture #4: Polar Oceanography (Dr. Eberhard Fahrback)
10.30 – 11.00 Coffee break
11.00 – 12.30 Lecture #5: Conceptual Models of the Atlantic Overturning (Prof. Dr. Anders Levermann)
12.30 Lunch
14.30 – 15:15 Lecture #6: Operational Oceanography (Dr. Bernd Brügge)
15.15 – 16:00 Lecture #7: Biogeochemical Time Series (Dr. Joanna Waniek)
16.00 – 16.30 Coffee break
16.30 – 18.00 Exercises / Discussions
18.00 – 20.00 Dinner
20.00 – 21.30 Participants Poster Session

Wednesday, 14. 9.: Ocean Theory and Modeling

08.00 – 09.00 Breakfast

09.00 – 10.30 Lecture #8: Theory of the Southern Ocean Circulation (Prof. Dr. Dirk Olbers)

10.30 – 11.00 Coffee break

11.00 – 12.30 Lecture #9: Global Ocean Observing Systems (Prof. Dr. Martin Visbeck)

12.30 Lunch

14.30 – 18.00 Excursion (hiking and work on Super Problem)

18.30 – 20.00 Dinner

20.00 – 21.30 Evening Lecture #10: Ocean and Climate (Prof. Dr. Mojib Latif)

Thursday, 15. 9.: Small Scale Ocean Physics and Mixing

08.00 – 09.00 Breakfast

09.00 – 10.30 Lecture #11: Mixing in the Ocean's Interior (Dr. Marcus Dengler)

10.30 – 11.00 Coffee break

11.00 – 12.30 Lecture #12: Mesoscale Ocean Dynamics and Mixing (Prof. Dr. Carsten Eden)

12.30 Lunch

14.30 – 15:15 Lecture #13: Seismic Oceanography (Dr. Gerd Krahlmann)

15.15 – 16:00 Lecture #14: Sea Ice (Prof. Dr. Dirk Notz)

16.00 – 16.30 Coffee break

16.30 – 18.00 Exercises / Discussions

18.00 – 20.00 Dinner

20.00 – 21.30 Presentations of Super Problem Results

Friday, 16. 9.: Ocean Biochemistry and Observing Systems

08.00 – 09.00 Breakfast

09.00 – 10.30 Lecture #15: CO₂ in the Ocean (Prof. Dr. Reiner Schlitzer)

10.30 – 11.00 Coffee break

11.00 – 12.30 Lecture #16: Ocean Biogeochemistry (Prof. Dr. Dieter Wolf-Gladrow)

12.30 Lunch

14.30 – 15:00 Summary of the Week (Roether)

15.00 End of summer school