

# DPG – Physics Summer School "Physics of the Ocean"

07. Sept. – 12. Sept. 2014, Physikzentrum Bad Honnef

## Schedule

### **Sunday, 07. 9.: Arrival, Reception, and Introduction**

15.00 – 17.30 Arrival of participants, Registration, room allocation.  
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, 08. 9.: Large Scale and Regional Oceanography**

08.00 – 09.00 Breakfast  
09.00 – 09.10 Plan of the Day  
09.10 – 10.40 Lecture #1: Introduction to Large-Scale Wind-Driven Circulation  
(*Prof. David Marshall*)  
10.40 – 11.00 Coffee break  
11.00 – 12.30 Lecture #2 Introduction to Large-Scale Density-Driven  
Circulation (*Prof. Dr. Wolfgang Roether*)  
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 – ... Welcome Evening (welcome party)

### **Tuesday, 09. 9.: Regional and Operational Oceanography, Observing Methods**

08.00 – 09.00 Breakfast  
09.00 – 09.10 Plan of the Day  
09.10 – 10.40 Lecture #4: Polar Oceanography (*Dr. Ursel Schauer*)  
10.40 – 11.00 Coffee break  
11.00 – 12.30 Lecture #5: Tropical Oceanography (*Prof. Dr. Peter Brandt*)  
12.30 Lunch  
14.00 – 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, 10. 9.: Southern Ocean, Global Observing Systems and Ocean-Climate interaction**

08.00 – 09.00 Breakfast

09.00 – 09.10 Plan of the Day

09.10 – 10.40 Lecture #8: Southern Ocean Circulation (*Prof. Dr. Sabrina Speich*)

10.40 – 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 (*Dr. Magdalena Balmadesa*)

**Thursday, 11. 9.: Modeling, Theory and Small Scale Ocean Physics**

08.00 – 09.00 Breakfast

09.00 – 09.10 Plan of the Day

09.10 – 10.40 Lecture #11: Global and Regional Ocean Modelling (*Prof. Dr. Arne Biastoch*)

10.40 – 11.00 Coffee break

11.00 – 12.30 Lecture #12: Internal gravity waves and ocean mixing (*Prof. Dr. Dirk Olbers*)

12.30 Lunch

14.30 – 15:15 Lecture #13: Mesoscale Ocean Dynamics (*Prof. Dr. Carsten Eden*)

15.15 – 16:00 Lecture #14: Mixing and the Tropical Oceans (*Dr. Marcus Dengler*)

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, 12. 9.: Ocean Biochemistry**

08.00 – 09.00 Breakfast

09.00 – 09.10 Plan of the Day

09.10 – 10.40 Lecture #15: CO<sub>2</sub> in the Ocean (*Prof. Dr. Reiner Schlitzer*)

10.40 – 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 (*Visbeck & Roether*)

15.00 End of summer school