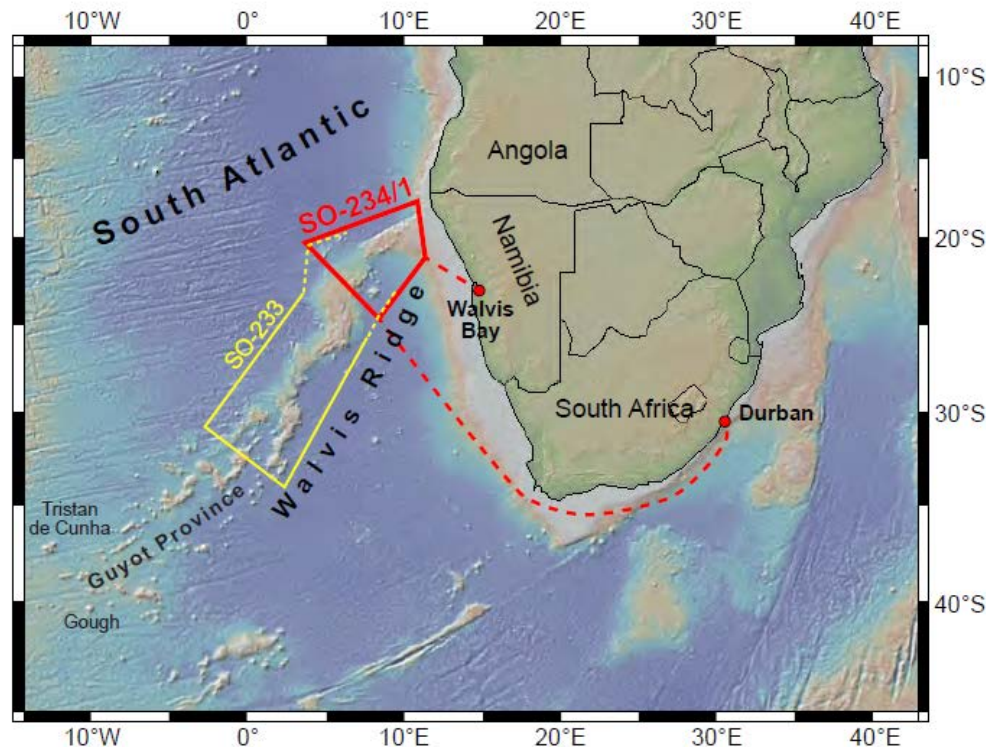


Training and Capacity Building Cruise planned on RV SONNE



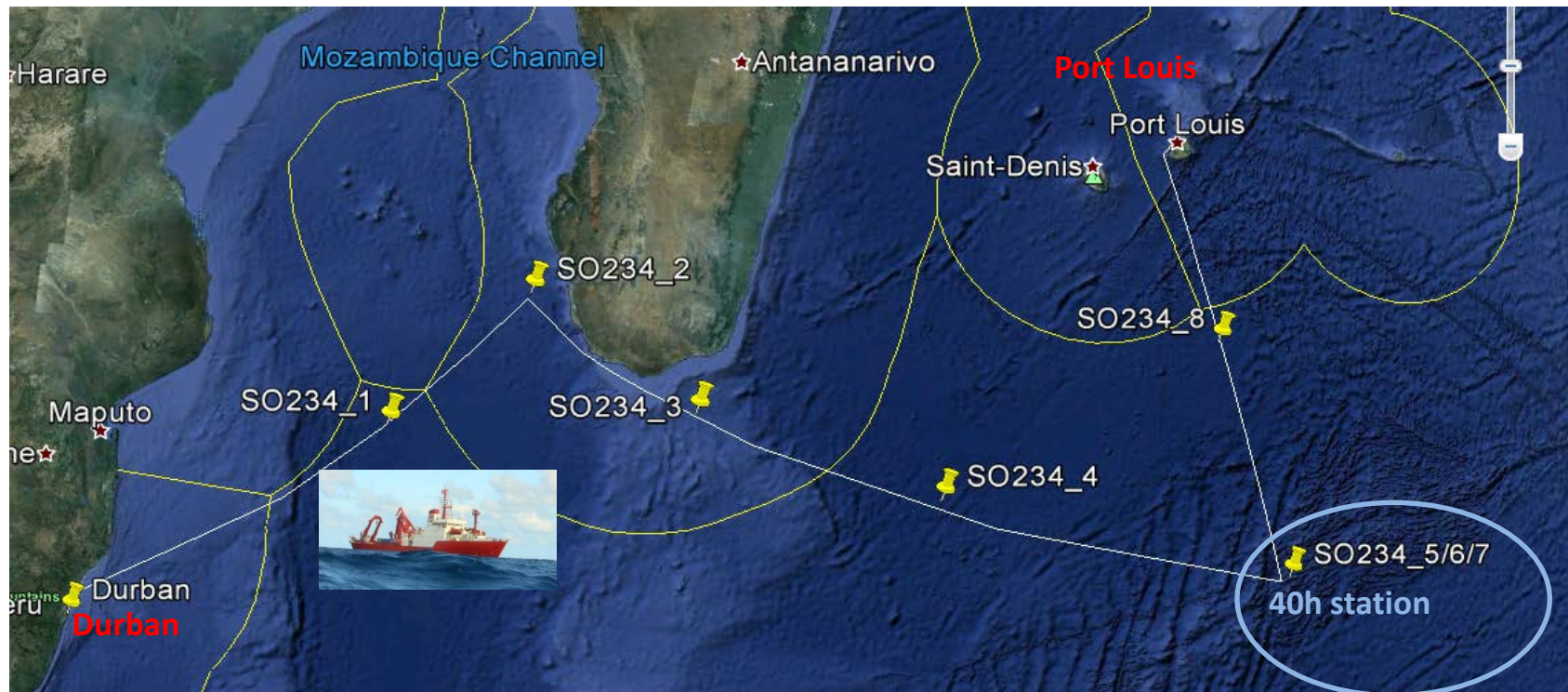
PD Dr. Kirstin Krüger

“SPACES-SONNE” Training and Capacity Building Cruise - **SO-234 leg 1**: 22 June - 6 July 2014



Dr. Reinhard Werner (Geology, GEOMAR)
Prof. Dr. Hans-Joachim Wagner (Biology, Uni Tübingen)

“SPACES-SONNE” Training and Capacity Building Cruise - **SO-234 leg 2**: 7-21 July 2014



PD Dr. Kirstin Krüger (Marine Meteorology, GEOMAR)

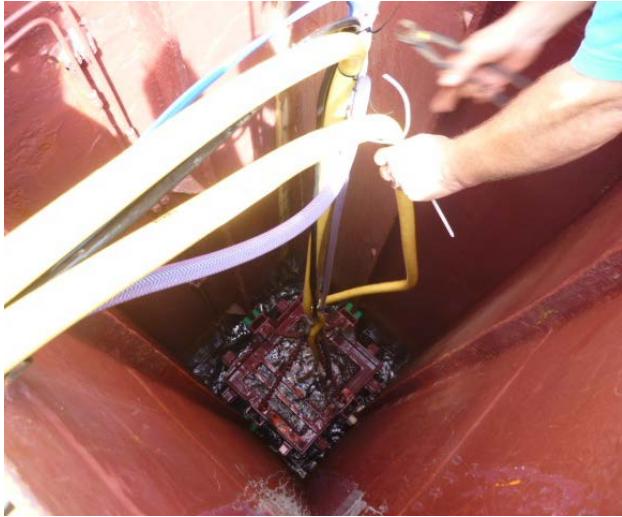
Prof. Dr. Christa Marandino (Chemical Oceanography, GEOMAR)

Study Program SO-234/2:

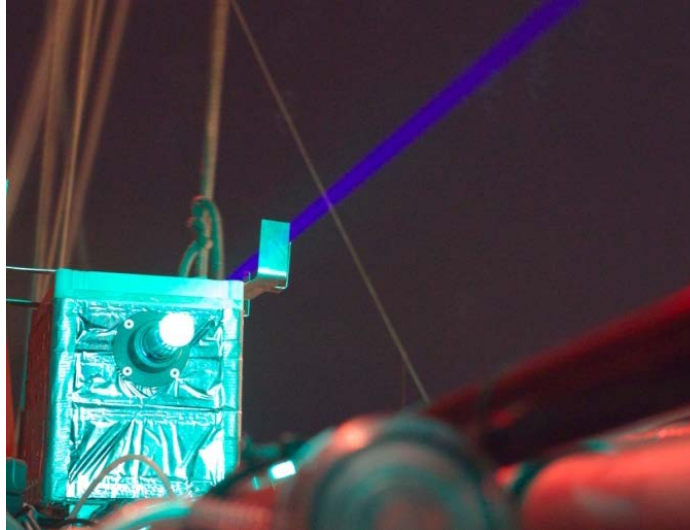
“Air-Sea Interactions in the western Indian Ocean”

- Pairs of students will be trained (African/German, maximum 16 students)
- Pairs will rotate through 5 different training stations:
 - 1) **Meteorology**, involving radiosonde launches,
 - 2) **Atmospheric physics**, including spectrophotometric determination of reactive trace gases in the atmosphere
 - 3) **Physical oceanography**, involving deep ocean profiles (CTD casts),
 - 4) **Biogeochemical cycling**, involving gas chromatographic and mass spectrometric analysis of seawater samples
 - 5) **Atmospheric chemistry**, involving air sampling of more than 50 trace gases.
- Data analysis
- Student presentations - final cruise colloquium

Atmosphere and Ocean measurements



Surface sea water sampling



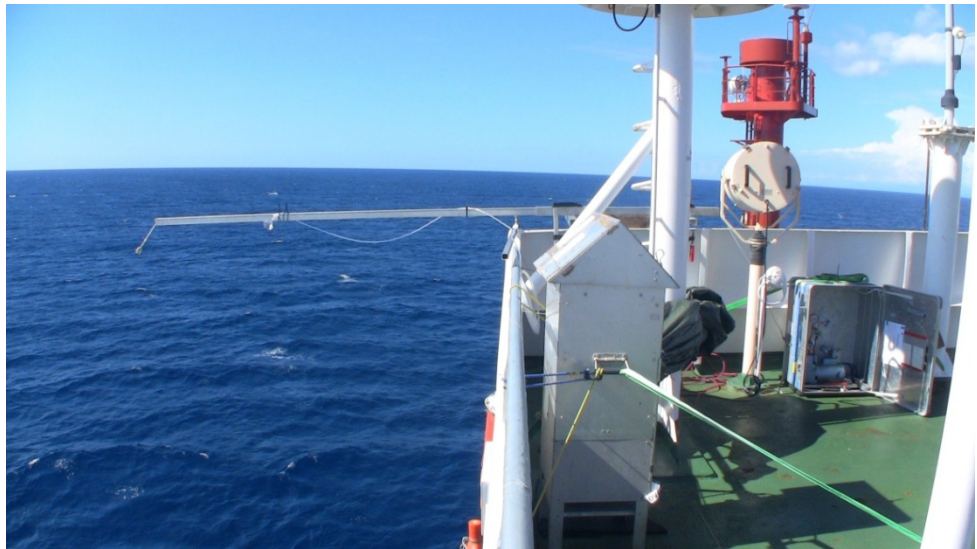
IO Laser measurements



Ozone sonde launches

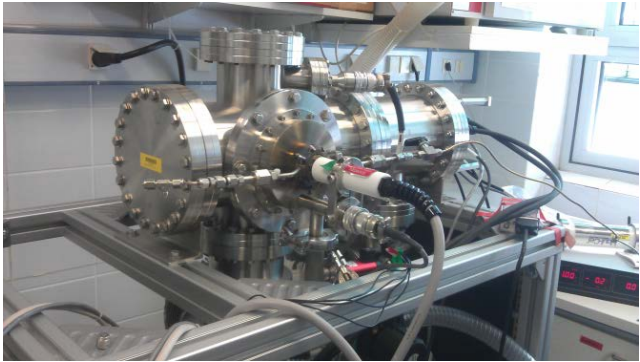


Deep sea water samples

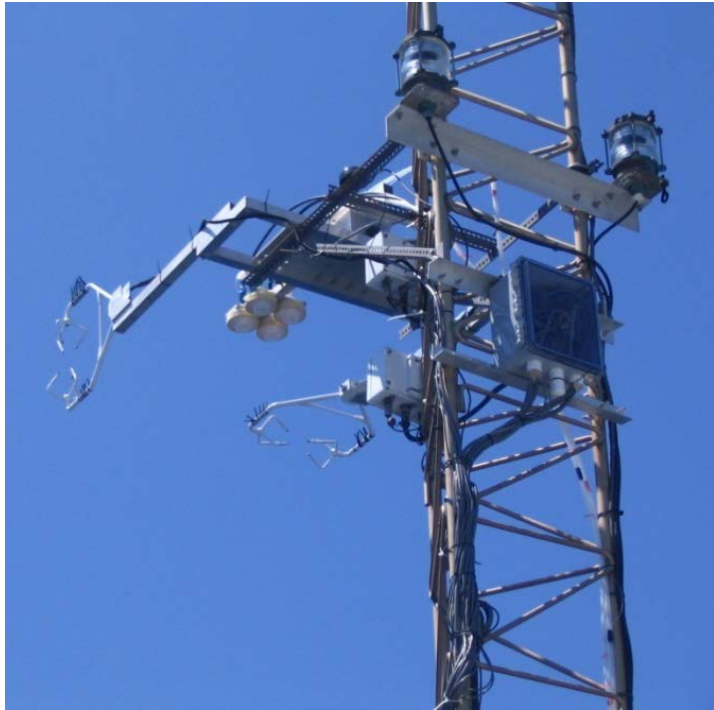


Atmospheric samples

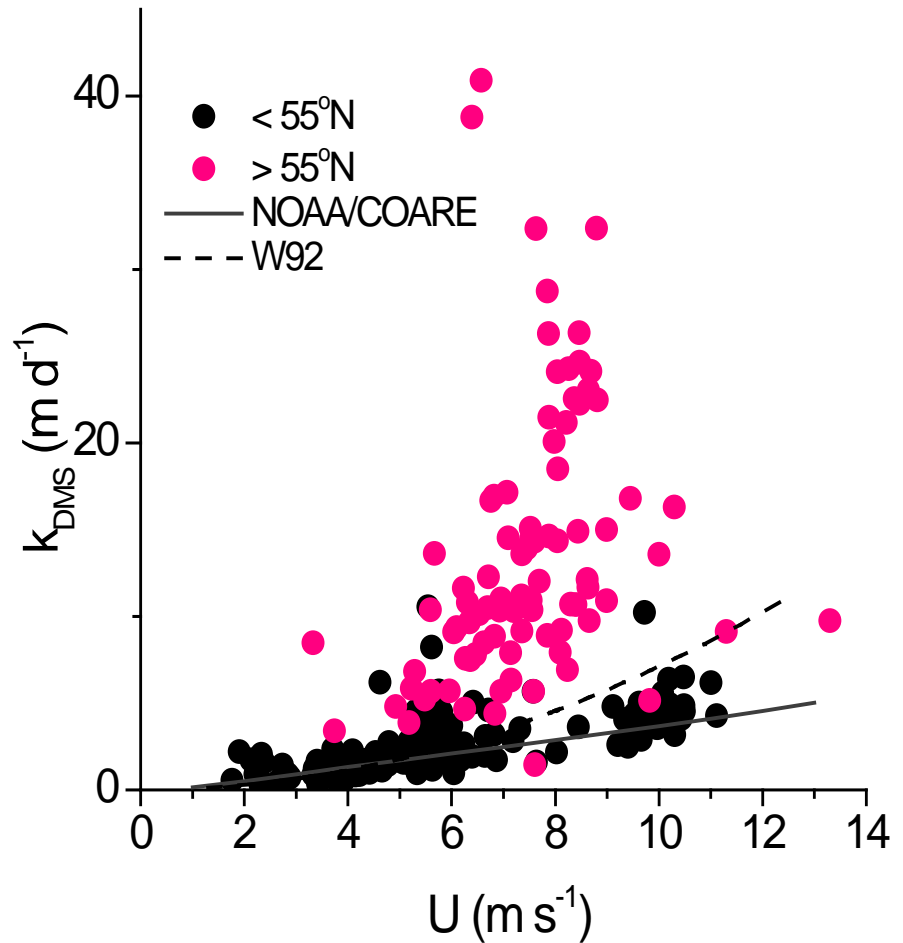
Direct eddy covariance measurements of trace gas emissions



Fast sensitive DMS analysis

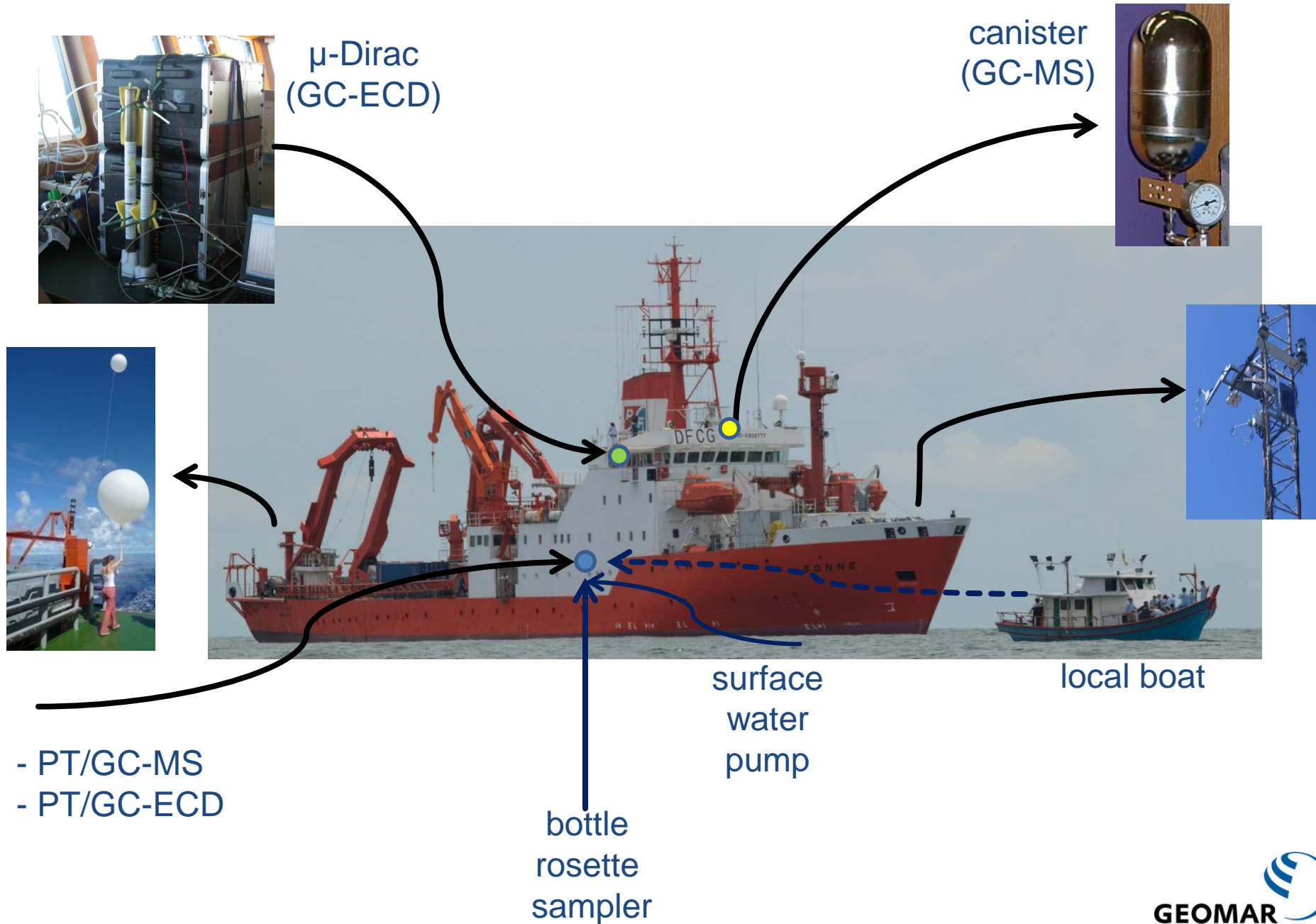


3D wind and motion measurements



Reveals differences between calculated and actual fluxes, especially in highly biologically active regions

Atmosphere and Ocean measurements on RV SONNE



Call for student applications:

SPACES –Training and Capacity Building Cruise RV SONNE



The German research vessel SONNE will be used to carry out a Training and Capacity Building Cruise in the framework of SPACES¹ in the waters around Southern Africa and the Indian Ocean during 22. June – 21. July 2014, from Walvis Bay (Namibia) to Port Louis (Mauritius). The co-ordinators of this project, at the GEOMAR Helmholtz Centre for Ocean Research Kiel and Namibia, invite up to 26 young scientists and students from Germany, Namibia and other countries in southern Africa to take part in one of the two legs of this cruise. Students and researchers who want to participate are requested to provide the information listed below to Project Management Jülich by 15 November 2013. Travel costs for participants will be provided by the project. Good health condition is required to join the cruise.

The aim of this cruise is research-based capacity building which should bring together researchers and students from Africa and Germany on board RV SONNE. A second goal is educating undergraduate and graduate students in different marine disciplines namely petrology, biology and maritime meteorology.



Applicants, please provide the following information and send this as a single PDF to the Projektträger Jülich by **15 November 2013**:

Dr. Barbara Tanner (b.tanner@fz-juelich.de)

(1) Background: My CV (max 1 page)

Name, age, nationality, profession, affiliation. Address, E-mail address, phone.

What is your experience in science, in particular in marine science? Any university courses? Have you been on a research vessel before?

Which languages do you speak?

Statements about personal fitness to work at sea for 13 days

(2) Motivation: The cruise and my future (max 2 pages)

Please answer the following questions. Not all of them may be applicable to you, so you may concentrate on those that are. Your answers will help us in selecting participants for the cruise.

A - Which of the proposed scientific topics are you mostly interested in? Why?

B - Do you have your own research topic(s) that you would like to pursue during the cruise?

C - What benefit for your personal career do you envisage from participating in the cruise? D

- What are your future career plans (basic science, industry, administration, other)?

E - Did you receive any help in preparing this application? If yes, by whom?

www.ptj.de/wtz-suedliches-afrika