

Second MS-GWaves Workshop

11-15 April 2016 in Schmitten

Agenda

Internal Diversity Awareness/ Discussion Training Courses:

Young Scientists: Monday 11 April 16:00 - Wednesday 13 April 12:00

PIs: Tuesday 12 April 13:00 - Wednesday 13 April 12:00

Scientific Workshop:

Wednesday 13 April

- 10:00-12:00 Gender/Diversity/Career Discussion for all (male and female) Young Scientists with Kaoru Sato and Chantal Staquet
- 12:00-13:00 *Lunch*
- Session 1* *Chair: Ulrich Achatz*
- 13:00-13:15 Introduction (Ulrich Achatz)
- 13:15-14:00 Ronald Smith (invited): Observing and Modeling Gravity Waves from the Troposphere to the Mesosphere
- 14:00-14:20 Sonja Gisinger (GW-TP / ROMIC GW-LCycle): GW-LCYCLE2 - field phase completed, analysis started
- 14:20-14:40 Isabell Krisch (SV/GW-LCYCLE – GLORIA): Gravity Wave Measurements with GLORIA during the GW-LCYCLE Campaign from January - March 2016
- 14:40-15:00 Irina Strelnikova (PACOG / ROMIC GW-LCycle): IAP observations during GWLCYCLE 2 campaign
- 15:00-15:30 *Break*
- Session 2* *Chair: Franz-Josef Lübken*
- 15:30-16:15 Kaoru Sato (invited): Interannual and intraseasonal variation of gravity waves in the tropical stratosphere revealed by high-resolution AIRS observations
- 16:15-16:35 Kathrin Baumgarten (PACOG): New results for GW analysis from lidar and radar data
- 16:35-16:55 Sven Wilhelm (PACOG): Particularities of the winter season 2015/16 relating mesospheric and tropospheric measurements
- 16:55-17:15 Benedikt Ehard (PACOG): Vertical propagation of large amplitude mountain waves at the edge of the polar vortex

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20 min presentation: 12 min presentation + 8 min discussion

45 min presentation: 35 min presentation + 10 min discussion

- 17:15-17:45 *Break*
- 17:45-18:45 Discussion
- 19:00 *Dinner*
- 20:00-20:45 Akylas Triantaphyllos (invited): Resonant Long-Short Wave Interactions in an Unbounded Rotating Stratified Fluid
- 20:45-22:30 Informal discussions

Thursday 14 April

Session 3 Chair: Günther Zängl

- 8:15- 9:00 Francois Lott (invited): Parameterization of non_orographic gravity waves in Climate models, formalism, impact and test against observations
- 9:00-9:20 Guidi Zhou (GWING). UA-ICON - State of Development: Physics
- 9:20-9:40 Sebastian Borchert (GWING). MA-ICON - State of development: Dynamics
- 9:40-10:10 *Break*

Session 4 Chair: Rupert Klein

- 10:10-10:55 Chantal Staquet (invited): On energy transfers toward large scales from oceanic internal gravity waves
- 10:55-11:15 Christopher Pütz (GW-TP): Short Wavelength Gravity Waves in the Tropopause
- 11:15-11:35 Vera Bense (GW-TP): Idealized Simulations of Orographic Gravity Waves - Case Studies for Observed Tropopause Configurations
- 11:35-11:55 Tanja Portele (GW-TP): Mountain Wave Propagation under Transient Tropospheric Forcing - A DEEPWAVE Case Study
- 12:00-12:45 *Lunch*
- 12:45-14:30 *Walk*

Session 5 Chair: Christoph Zülicke

- 14:30-14:50 Joran Rolland (SI): Three dimensional Orthogonal basis for gravity waves and planetary waves, for projected dynamics and analysis
- 14:50-15:10 Steffen Hien (SI): Gravity wave emission and propagation in the differentially heated rotating annulus experiment
- 15:10-15:30 Lena Schoon (SI): Preliminaries for vortex dipole simulations to study jet-generated gravity waves
- 15:30-15:50 Costanza Rodda (SI): First experimental results from the new differentially heated rotating annulus
- 15:50-16:10 Illja Horenko (SI): SI-Project: HPC Data-Analysis beyond the usual assumptions
- 16:10-16:40 *Break*

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Thursday 14 April

Session 6 *Chair: Uwe Harlander*

16:40-17:00 Gergely Böllöni (3DMSD): The interaction between atmospheric gravity waves and large-scale flows: an efficient description beyond the non-acceleration theorem

17:00-17:20 Junhong Wei (3DMSD): Gravity-wave mean-flow interactions extended: Rotation and unbalanced backgrounds

17:20-17:40 Bruno Ribstein (ROMIC-GRAVITY): Interaction between Middle-Atmosphere Solar-Tides and Gravity-Waves

17:40-18:00 Mark Schlutow (3DMSD): Pseudo-incompressible gravity wave trains and stability

18:00-18:45 Discussion

18:45 *Dinner*

20:00-22:30 Project Meetings/ Informal discussions / Gender discussion

Friday 15 April

8:00-10:00 Research Area Meetings (Groups: P and D&I)
Chairs: Peter Preusse (D&I), Uwe Harlander (P)

10:00-10:30 *Break*

10:30-12:00 Discussion

12:00-13:00 *Lunch*

13:00 *End of Workshop*

13:00-15:00 PI Meeting

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45 min presentation: 35 min presentation + 10 min discussion