

# Workshop MS-GWaves 19-21 March in Kassel - Agenda

## Monday 19 March

### Session 1

Chair: Lena Schoon

- 9:00 - 9:15 **Introduction**
- 9:15 - 10:00 *Carsten Eden (invited)*: Numerical evaluations of wave-wave interactions
- 10:00 - 10:30 *Erich Becker (GWING)*: The role of secondary GWs in the general circulation of the MLT
- 10:30 - 11:00 **Break**

### Session 2 GW-TP

Chair: Mark Schlutow

- 11:00 - 11:30 *Christopher Pütz (GW-TP)*: Evolution of wave packets in non-uniform background
- 11:30 - 12:00 *Andreas Dörnbrack (GW-TP)*: Vertical propagation of non-hydrostatic gravity waves into the mesosphere
- 12:00 - 12:30 *Peter Spichtinger (GW-TP)*: Propagation of gravity waves through an idealized tropopause inversion layer
- 12:30 - 13:30 **Lunch**

### Session 3 GWING/Invited

Chair: Steffen Hien

- 13:30 - 14:15 *Hella Garny (invited)*: Changes in the stratospheric circulation in response to climate change and its sensitivity to current gravity wave parametrizations
- 14:15 - 14:45 *Hauke Schmidt (GWING)*: Current Status at MPI-M
- 14:45 - 15:15 *Sebastian Borchert (GWING)*: On a variable launch spectrum for the non-orographic GW parameterization in UA-ICON
- 15:15 - 15:45 **Break**

### Session 4 3DMSD

Chair: Costanza Rodda

- 15:45 - 16:15 *Mark Schlutow (3DMSD)*: Stability of large-amplitude traveling wave packets
- 16:15 - 16:45 *Gergely Bölöni (3DMSD)*: Towards the implementation of a transient gravity wave drag parametrization in ICON
- 16:45 - 17:15 *Junhong Wei (3DMSD)*: Efficient modelling of the gravity-wave interaction with unbalanced resolved flows: Pseudo-momentum-flux convergence vs direct approach
- 17:15 - 17:30 **Break**

### Session 5 SV

Chair: Jens Söder

- 17:30 - 18:00 *Isabell Krisch (SV)*: GLORIA observations of GWs during PGS and WISE
- 18:00 - 18:30 *Cornelia Strube (SV)*: Horizontal propagation into the southern polar night jet, a case study for DEEPWAVE
- 19:00 **Dinner**
- 20:30 - 22:00 Research Progress Discussions

*Time frame:*

**30 min presentation: 20 min presentation +10 min discussion**

**45 min presentation: 35 min presentation + 10 min discussion**

## Workshop MS-GWaves 19-21 March in Kassel - Agenda

### Tuesday 20 March

#### Session 6 Invited

Chair: Sebastian Borchert

- 8:30 - 9:15 *Mike Taylor (invited)*: Investigating Gravity Waves Using an Advanced Mesospheric Temperature Mapper
- 9:15 - 10:00 *Alexander Medvedev (invited)*: Interactions of gravity waves with tides and the geomagnetic field in the upper atmosphere

10:00 - 10:30 **Break**

#### Session 7 PACOG

Chair: Isabell Krisch

- 10:30 - 11:00 *Irina Strelnikova (PACOG)*: Statistical study of Hodograph analysis of ALOMAR Lidar observations
- 11:00 - 11:20 *Gunter Stober (PACOG)*: Diagnosing the short term variability of tides
- 11:20 - 11:50 *Robert Reichert (PACOG)*: Retrieval of intrinsic gravity wave parameters from lidar and airglow temperature data and radar wind data
- 11:50 - 12:45 **Lunch**
- 12:45 - 15:45 **Outdoor**

#### Session 8 SI/Invited

Chair: Christopher Pütz

- 15:45 - 16:30 *Sharon Vadas (invited)*: Primary and secondary gravity waves in the lower and middle atmosphere
- 16:30 - 17:00 *Christoph Zülicke (SI)*: Jet-generated gravity waves: Parameterization formula and case studies
- 17:00 - 17:30 *Steffen Hien (SI)*: Spontaneous inertia-gravity wave generation in the differentially heated rotating annulus experiment
- 17:30 - 17:45 **Break**

#### Session 9 SI

Chair: Cornelia Strube

- 17:45 - 18:15 *Costanza Rodda (SI)*: Emission of inertia-gravity waves in the differentially heated rotating annulus laboratory experiment
- 18:15 - 18:30 *Georg Sebastian Völker*: Generation of Near-Inertial Internal Gravity Waves by Wind in Simplified Ocean Models
- 18:30 - 18:45 *Elena Gagarina*: Variational approaches to water wave simulations.
- 19:15 **Dinner**
- 20:30 - 22:00 Research Progress Discussions

*Time frame:*

**30 min presentation: 20 min presentation +10 min discussion**

**45 min presentation: 35 min presentation + 10 min discussion**

# Workshop MS-GWaves 19-21 March in Kassel - Agenda

## Wednesday 21 March

### General Discussions

08:00 - 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**

### End of scientific part

13:00 - 15:00 *In parallel:*

**PI meeting**

**Career Discussion with Sharon Vadas, Hella Garny and the ECS**

*Time frame:*

**30 min presentation: 20 min presentation +10 min discussion**

**45 min presentation: 35 min presentation + 10 min discussion**