

# Virtual MS-GWaves Meeting 23-25 November 2020

## Agenda

Time zone of Boulder (am); 8 hours delay

### Monday 23 November

9:30 - 11:00 ECS Career discussion with Anne Smith and Inna Politchouk

### Tuesday 24 November

#### Session 1: Introduction/3DMSD/GW-ICE

2:45 - 3:00 Introduction

3:00 - 3:25 *Mark Schlutow (3DMSD)*: The gas centrifuge - An opportunity to study atmospheric gravity waves in the laboratory

3:25 - 3:50 *Georg Sebastian Völker (3DMSD)*: Triadic Wave-Wave Interactions in the Vicinity of Strong Shear Flows

3:50 - 4:15 *Peter Spichtinger (GW-ICE)*: Gravity-waves impact on ice clouds in the tropopause region

4:15 - 6:00 **Lunch**

#### Session 2: GWING

6:00 - 6:25 *Andrea Schneidereit (GWING)*: Does resolution matter? Signatures of gravity waves with changing vertical resolution.

6:25 - 6:55 *Gergely Bölöni (GWING)*: Latest developments of MS-GWaM in ICON

6:55 - 7:15 **Break**

#### Session 3: SV

7:15 - 7:40 *Young-Ha Kim (ROMIC-QBICC)*: Coupling of gravity wave drag to the equatorial Kelvin wave simulated by ICON/MS-GWaM

7:40 - 8:05 *Markus Geldenhuys (SV)*: Orographically Induced Spontaneous Imbalances within the Jet causing a Large Scale Gravity Wave Event

8:05 - 8:35 **Break**

8:35 - 9:00 *Lukas Krasauskas (SV)*: Double Hexagon Flight during SOUTHTRAC

9:00 - 9:25 *Sebastian Rhode (ROMIC-WASCLIM)*: Orographic GW Distributions via Ridge Parameterization

9:25 - 9:50 *Fanni Dora Kelemen (SV)*: Topography representation in Pinc Floit

9:50 - 10:20 **Break**

#### Session 4: Invited Presentations

10:20 - 11:05 *Anne Smith (invited)*: What is the contribution of gravity waves to driving zonal winds in the tropical upper stratosphere?

11:05 - 11:50 *Christopher Kruse (invited)*: Constraining Middle-Atmosphere Mountain Wave Momentum Flux and Drag with Satellite Observations, a mini-MIP, and an OSSE

Time frame: 25 min presentation: 17 min presentation +8 min discussion

45 min presentation: 35 min presentation + 10 min discussion

## Wednesday 25 November

### Session 5: SI

- 3:00 - 3:25 *Costanza Rodda (SI)*: Gravity wave turbulence in laboratory experiments  
3:25 - 3:50 *Fabienne Schmid (SI)*: Efficient modeling of baroclinic life cycles with a semi-implicit pseudo-incompressible model for the study of spontaneous inertia-gravity wave emission  
3:50 - 4:15 *Christoph Zülicke (SI)*: Lagrangian perspective on jet-generated gravity waves

4:15 - 6:00 **Lunch**

### Session 6: PACOG

- 6:00 - 6:25 *Robert Reichert (PACOG)*: Wave climatology from long-term CORAL measurements at Rio Grande, Argentina  
6:25 - 6:50 *Sonja Gisinger (PACOG)*: Comparison of in-situ flight level data with outputs of various high-resolution NWP models  
6:50 - 7:10 **Break**

### Session 7: PACOG/SOUTHTRAC

- 7:10 - 7:35 *Bernd Kaifler (PACOG)*: Airborne gravity wave measurements and analysis using ALIMA during ST08 of SouthTRAC-GW  
7:35 - 8:00 *Aman Gupta (LMU München)*: Monthly Climatologies of Gravity Wave Momentum Fluxes in ERA5  
8:00 - 8:25 *Jens Söder (PACOG)*: Gravity wave attenuation: From turbulence measurements to a case study  
8:25 - 8:55 **Break**

### Session 8: PACOG/Invited/Discussion

- 8:55 - 9:20 *Irina Strelnikova and Harikrishnan Charuvil Asokan (PACOG)*: Lidar and radar observations in comparison with UA-ICON general circulation model  
9:20 - 10:05 *Inna Politchouk (invited)*: Representation and generation of resolved gravity waves in high-resolution global atmospheric models  
10:05 - 12:00 *Discussion time*

*Time frame: 25 min presentation: 17 min presentation +8 min discussion*  
**45 min presentation: 35 min presentation + 10 min discussion**