

## Schedule of the Bad Honnef Physics School on Atmospheric Physics

### Day 1, Sunday: Arrival and Introduction

Arrival until 17:00

17:00 – 18:00 Icebreaker

18:00 – 19:30 Dinner

20:00 – 21:00 Introduction to the physics school (von Savigny & Notholt)

### Day 2, Monday: Atmospheric remote sensing

08:45 – 09:00 Introduction to today's programme

09:00 – 10:30 Lecture 1: Introduction to UV/vis remote sensing (Platt)

10:30 – 11:00 Coffee break

11:00 – 12:30 Lecture 2: Introduction to IR remote sensing (Notholt)

12:30 – 14:00 Lunch

14:00 – 15:30 Lecture 3: Introduction to microwave remote sensing (Crewell)

15:30 – 16:00 Coffee break

16:00 – 18:00 Poster Session (all participants)

18:00 – 19:30 Dinner

### Day 3, Tuesday: Chemical composition Measurements

08:45 – 09:00 Introduction to today's programme

09:00 – 10:30 Lecture 4: Pollution monitoring in the optical spectral range (Richter)

10:30 – 11:00 Coffee break

11:00 – 12:30 Lecture 5: Introduction to In-situ measurements of atmospheric composition (Koppmann)

12:30 – 14:00 Lunch

14:00 – 15:30 Lecture 6: Introduction to LIDAR remote sensing of atmospheric composition (Steinbrecht)

15:30 – 16:00 Coffee break

16:00 – 18:00 Discussion on the effects of the COVID-19 pandemic on the state of the atmosphere (All, with introductory presentations by participants)

18:00 – 19:30 Dinner

### Day 4, Wednesday: Physics of stratospheric processes

08:45 – 09:00 Introduction to today's programme

09:00 – 10:30 Lecture 7: Modelling large volcanic eruptions (Timmreck)

10:30 – 11:00 Coffee break  
11:00 – 12:30 Lecture 8: Introduction to stratospheric modelling (Dameris)  
12:30 – 14:00 Lunch  
14:00 – 18:00 Excursion / Hiking  
18:00 – 19:30 Dinner

**Day 5, Thursday: Meteorology / physics of the middle and upper atmosphere**

08:45 – 09:00 Introduction to today's programme  
09:00 – 10:30 Lecture 9: Storylines of future meteorological extremes (Jung)  
10:30 – 11:00 Coffee break  
11:00 – 12:30 Lecture 10: Introduction to airglow and remote sensing applications (von Savigny)  
12:30 – 14:00 Lunch  
14:00 – 15:30 Lecture 11: Introduction to modelling particle precipitation effects on atmospheric chemistry (Sinnhuber)  
15:30 – 16:00 Coffee break  
16:00 – 17:30 Lecture 12: Introduction to ionospheric physics (Stolle)  
18:00 – 19:30 Dinner

**Day 6, Friday: Laboratory studies & thermodynamic foundation**

08:45 – 09:00 Introduction to today's programme  
09:00 – 10:30 Lecture 13: Laboratory Studies on Aerosol- Cloud Interaction and Precipitation Formation (Leisner)  
10:30 – 11:00 Coffee break  
11:00 – 12:30 Lecture 14: Thermodynamics of the Earth System (Axel Kleidon)  
12:30 – 14:00 Lunch  
14:00 – 15:00 Summary (Notholt & von Savigny)  
15:00 End of Summer School