

Bad Honnef Physics School
Atmospheric Physics: experiments, modelling and current topics
March 22 – 27, 2026

Day 1, Sunday: Arrival and Introduction

18:00 – 19:30 Dinner

20:00 – 21:30 Introduction to the physics school (von Savigny & Falk) & Ice breaker

Day 2, Monday: Atmospheric remote sensing

07:30 – 08:45 Breakfast

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 (Stiller)

12:30 Lunch

14:00 – 15:30 Lecture 3: Introduction to satellite remote sensing of tropospheric composition (Richter)

15:30 – 16:00 Coffee break

Modelling atmospheric processes

16:00 – 17:30 Lecture 4: Storylines of future meteorological extremes (Jung)

18:00 – 19:30 Dinner

Day 3, Tuesday: Chemical composition of the atmosphere

07:30 – 08:45 Breakfast

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

09:00 – 10:30 Lecture 5: Introduction to microwave remote sensing (Crewell)

10:30 – 11:00 Coffee break

11:00 – 12:30 Lecture 6: Modelling atmospheric chemistry (Falk)

12:30 Lunch

14:00 – 15:30 Lecture 7: Introduction to LIDAR remote sensing of stratospheric composition (Steinbrecht)

Storylines of future meteorological extremes (Jung)

15:30 – 16:00 Coffee break

16:00 – 18:00 Poster session (with posters by the participants)

18:00 – 19:30 Dinner

Day 4, Wednesday: Volcanic effects and geoengineering

07:30 – 08:45 Breakfast

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

09:00 – 10:30 Lecture 8: Modelling large volcanic eruptions (Krüger)

10:30 – 11:00 Coffee break

11:00 – 12:30 Lecture 9: Solar radiation management (Bednarz)

12:30 Lunch

14:00 – 18:00 Excursion

18:00 – 19:30 Dinner

Day 5, Thursday: Physics of the middle and upper atmosphere and exo-(planet) atmospheres

07:30 – 08:45 Breakfast

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

09:00 – 10:30 Lecture 10: Introduction to airglow and remote sensing applications (von Savigny)

10:30 – 11:00 Coffee break

11:00 – 12:30 Discussion on possibilities and risks of geoengineering (All, with introductory presentations by participants)

12:30 Lunch

14:00 – 15:30 Lecture 11: Introduction to ionospheric physics (Spogli)

15:30 – 16:00 Coffee break

16:00 – 18:00 Lecture 12: Modelling the atmospheres of planets and exoplanets (Sinnhuber)

18:00 – 19:30 Dinner

Day 6, Friday: Laboratory studies & thermodynamic foundation

07:30 – 08:45 Breakfast

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

09:00 – 10:30 Lecture 13: Jets, bubbles, spikes and breakups: How ice spreads in Clouds (Leisner)

10:30 – 11:00 Coffee break

11:00 – 12:30 Lecture 14: Thermodynamics of the Earth System (Axel Kleidon)

12:30 – 12:45 Summary & concluding remarks (Falk & von Savigny)

12:45 Lunch

End of Summer School