

“Optics and spectroscopy for remote-sensing of the Earth’s atmosphere”

Lecturer:

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Abstract:

Atmospheric changes have a substantial impact on the Earth system, in particular increasing concentrations of greenhouse gases, pollutants in the troposphere, and ozone-destroying substances in the stratosphere. Therefore, accurate measurements of atmospheric trace gases are indispensable for understanding and predicting future developments.

In this talk, I will present current activities of my institute in order to study the evolution of atmospheric composition from a variety of platforms, such as ground-based observatories world-wide, different research and commercial aircrafts, high-altitude (stratospheric) balloons, and different satellites, using precise optical instruments. Optics and spectroscopy for remote-sensing of the Earth’s atmosphere