

Summer School LIDAR

LIDAR: From Fundamentals to Geophysics and Industrial Applications



Crédits photo: SIMO2015, SI OHP-GEO

June 11-16, 2023

OPH, Observatoire de Haute Provence, France



The Summer School “**LIDARS: From Fundamentals to Geophysics and Industrial Applications**” is dedicated to Master students, PhD students, young researchers and engineers who want to acquire theoretical and technical know-how on Lidar systems from experts in the Lidar community.

The 5-days program will first cover fundamentals of laser-matter interaction in the atmosphere. Lidar methods for remote sensing will then be presented as well as related applications for climate, air quality, atmospheric dynamics, transports, aeronautics... Special highlight will be placed on Lidar inversion protocols and on critical lidar components such as lasers and detectors. The hot topics of space lidars and lidar networks will close this Lidar week.

The Summer School will take place at **Observatoire de Haute Provence (OHP)**, one of the largest worldwide observatories for atmospheric sciences. Participants will have the opportunity to visit the Lidar facilities of OHP and to perform additional practical work to study “open-box” LIDAR instruments.

Look forward to welcoming you from 11 to 16 June 2023 at OHP!

Members of the **LIDAR club of SFO** and their collaborators will give 22h of course that will cover a broad spectrum going from fundamental to geophysics and industrial applications:

Topics:

- Fundamentals of laser-matter interaction (molecules, aerosols, dense medium and surfaces)
- Lidar measurement methods and inversion protocols
- Critical lidar components (lasers, detectors)
- Applications of lidars for geophysics (climate, air quality)
- Application of lidars for applied science (aeronautics, transports...)
- Lidars networks and space Lidars.
- Practical work on lidar instruments (handling and analysis)

Attending a Summer School is a unique opportunity to learn, share and connect with top leaders in the field. The school is designed for students and researchers using Lidar methods and for physicists participating in their development.

Application deadline (short motivation letter + CV): Mars 1st, 2023

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