

SORBETTO 13-15 September 2021	Teacher	Institution / Nationality	Italian Local time: (UTC+2)
Connection tests			9:00 - 9:15
Presentation of the school	M.Campanelli and Julian Gröbner		9:15 – 9:30
Ground based instruments			
Monday 13 morning			
Theory			
Black Body and solar spectrum Basic Radiometric quantities	T. Nakajima	AORI / Japan	9:30-10:00
Scattering (Rayleigh, Mie) and Absorption by aerosol and gases RTE: Beer Law and RTE solutions;	T. Nakajima	AORI / Japan	10:00-11:00
<i>Questions</i>			<i>11:00-11:20</i>
<i>break</i>			<i>11:20-11:40</i>
Basics on aerosol retrieval algorithms from different remote sensing techniques (GRASP)	O.Dubovik/David Fuertes	LOA/CNRS France	11:40-12:40
<i>Questions</i>			<i>12:40-13:00</i>
<i>break</i>			<i>13:00-14:00</i>
Monday 13 afternoon			
Photometry			
SKYNET network, products	T. Nakajima/V. Estelles	AORI /Japan UV/Spain	14:00-14:25
AERONET network, solar and polarized instruments, products	Philippe Goloub	LOA/CNRS France	14:25-15:05
Lunar photometry	Africa Barreto	AEMET/Spain	15:05-15:30
<i>Questions</i>			<i>15:30-15:50</i>
<i>break</i>			<i>15:50-16:10</i>
Mobile photometry and integrated observation	Philippe Goloub	LOA/CNRS France	16:10-16:30
GAW and Homogenisation activities of aerosol networks at PMOD/WRC	Stelios Kazadzis	PMOD/WRC/ Swiss	16:30-17:10
<i>Questions</i>			<i>17:10-17:30</i>
Tuesday 14 morning			
Spectrometry			
Spectral solar measurements with array spectroradiometers	Natalia Kouremeti	PMOD/WRC/ Swiss	9:30-10:00
Brewer	H. Diemoz	Arpa_VDA/Italy	10:00-10:30
Doas	Folkard Wittrock	UniBrem / Germany	10:30-11:00
<i>Questions</i>			<i>11:00-11:20</i>
<i>Break</i>			<i>11:20-11:40</i>
Pandonia	Axel Kreuter	Luftblick/Austria	11:40-12:10

Aerosol optical properties from lunar, solar and stellar remote sensing: an overview of the different techniques and methods	Lionel Doppler	DWD/Germany	12:10–12:40
<i>Questions</i>			12:40-13:00
<i>Break</i>			13:00-14:00
Tuesday 14 afternoon			
Metrology applied to solar radiometry			
Metrology support to atmospheric composition measurements	Saulius Nevas	PTB/Germany	14:00 -14:30
Traceability concepts for Aerosol optical depth measurements	Natalia Kouremeti	PMOD/WRC/Swiss	14:30-15:00
On site Calibrations (Sun photometers)	Monica Campanelli	ISAC-CNR/Italy	15:00-15:30
<i>Questions</i>			15:30-15:50
<i>Break</i>			15:50-16:10
Instrument and network operations best practices	Axel Kreuter/M.Campanelli	LuftBlick /Austria; CNR Italy	16:10-16:40
BAQUININ project	Stefano Casadio	SERCO / Italy	16:40-17:10
<i>Questions</i>			17:10-17:30
Wednesday 15 morning			
Satellite			
Overview on satellite remote sensing	O. Dubovik	LOA/CNRS France	9:30 -10:00
Overview on satellite ESA missions	Christian Retscher	ESA	10:00-10:30
Overview on Cal Val activities	Jonas Von Bismarck	ESA	10:30-11:00
<i>Questions</i>			11:00-11:20
<i>Break</i>			11:20-11:40
Aerosol-related observations of Copernicus Sentinel-5P, CO2M Mission and 3MI on MetOp-SG	Oleg Dubovik	LOA/CNRS France	11:40-12:40
<i>Questions</i>			12:40-13:00
<i>Break</i>			13:00-14:00

Wednesday 15 afternoon			
Copernicus Sentinel-5 Precursor mission measurements and applications (including an outlook to Sentinel-4/5)	Claus Zehner	ESA	14:00-14:45
Guide to Anthropogenic Greenhouse Gas Monitoring (CO ₂ & CH ₄) from Satellites.	Yasjka Meijer	ESA	14:45-15:30
<i>Questions</i>			<i>15:30-15:50</i>
<i>break</i>			<i>15:50-16:10</i>
Traceability of solar radiation measurements & the project MAPP	Julian Gröbner	PMOD/WRC/ Swiss	16:10-16:40
Conclusions	M.Campanelli and Julian Gröbner		16:40-17:10