

ES1309 OPTIMISE COST Action - Final Conference

AGENDA 19 February 2018 – Subject to modifications

Wednesday (21 February)

08:00-09:00		Registration
09:00-09:20		Welcome
09:20-09:40	Session 1: Scientific Networking	Alasdair Mac Arthur (Univ. of Edinburgh, UK): <i>“An introduction to COST Action ES1309 OPTIMISE”</i>
09:40-10:10		Timo Vesala (Univ. of Helsinki, Finland): <i>“ICOS – From Science Projects to Integrated Infrastructure” (keynote)</i>
10:10-10:40		Nicholas Coops (Univ. of British Columbia, Canada): <i>“Use of Innovative Remote Sensing Platforms and Networks for Vegetation Monitoring” (keynote)</i>
10:40-11:10		Coffee break
11:10-11:35		Edoardo Cremonese (ARPA, Valle d'Aosta, Italy): <i>“Linking near-surface remote sensing of plant phenology to ecosystem functioning: current state and perspectives from PhenoCam networks”</i>
11:35-12:00		Natascha Kljun (Swansea University, UK): <i>“The Flux Footprint Prediction - Online Tool”</i>
12:00-13:00		Lunch
13:00-13:30	Session 2: Spectral data: from collection to databases	Laurie Chisholm (Univ. of Wollongong, Australia): <i>“Instruments, spectral data management and protocols” (keynote)</i>
13:30-13:45		M. Pilar Cendrero-Mateo (Univ. of Valencia, Spain), Javier Pacheco-Labrador (MPI Jena, Germany), Helge Aasen (ETH Zürich, Switzerland): <i>“Introduction to OPTIMISE review papers: Sun-Induced Chlorophyll Fluorescence - from instrument characterization and measurement protocols to retrieval methods.”</i>
13:45-14:05		Javier Pacheco-Labrador (MPI Jena, Germany): <i>“Instrumental considerations for the measurement of sun induced fluorescence”</i>
14:05-14:25		Laura Mihai (INFLPR, Romania): <i>“Protocols for field spectrometers spectral and radiometric calibrations”</i>
14:25-14:45		Helge Aasen (ETH Zürich, Switzerland): <i>“Measurement setups and protocols for solar-induced chlorophyll fluorescence and reflectance measurements”</i>
14:45-15:05		Shari Van Wittenberghe (Univ. of Valencia, Spain): <i>“Ecosystem spectral measurements: best practice metadata/ancillary dataset”</i>
15:05-15:35		Coffee break
15:35-15:55		M. Pilar Cendrero-Mateo (Univ. of Valencia, Spain): <i>“Ground measurements of Solar-induced chlorophyll fluorescence: retrievals methods and practical cases”</i>
15:55-16:15		Paul Näthe (FZ Jülich, Germany and JB Hyperspectral Devices, Germany): <i>“Exploiting top of Canopy Sun Induced Chlorophyll Fluorescence by the FloX. From Instrument performance to data processing”</i>
16:15-16:35		Simon Trim (Univ. of Zürich, Switzerland): <i>“FloX integrated data flow: from tower to database”</i>
16:35-17:00		Luis Alonso (Univ. of Valencia, Spain): <i>“Passive SIF measurements at leaf level”</i>
17:00-17:30	Stefan Metzger (NEON, USA): <i>“NEON: from scientific strategy to long-term operation” (remote talk)</i>	
17:30-18:30		Poster session
18:30-19:30		Welcome cocktail

Thursday (22 February)

08:30-09:00		Registration
09:00-09:30	Session 3: Unmanned Aerial Vehicles (UAVs) for vegetation monitoring	Pablo Zarco-Tejada (European Commission, JRC, Italy): <i>"Plant physiological traits from high resolution hyperspectral and thermal imagery: models and indices for early stress detection"</i> (keynote)
09:30-09:45		Enrico Tomelleri (Free Univ. of Bozen, Italy): <i>"Inversion of PROSAIL model from UAV-borne data"</i>
09:45-10:00		Alasdair Mac Arthur (Univ. of Edinburgh, UK): <i>"DFOV multi-spectrometer system for reflectance and fluorescence measurements from mobile and fixed platforms"</i>
10:00-10:15		Helge Aasen (ETH Zürich, Switzerland): <i>"Non-imaging (ground) and imaging (UAV) measurements differ due to different specific field of views"</i>
10:15-10:30		Julia Kelly (Swansea University, UK): <i>"Testing the performance of a UAV thermal camera"</i>
10:30-11:00		Coffee break + poster session
11:00-11:15		Denis Nikolaev (EMLID, Russia): <i>"RTK GNSS for UAV mapping"</i>
11:15-11:30		Marco Dubbini (Univ. Bologna, Italy): <i>"Comparison of proximity VIS-NIR data acquired with MAIA sensor on 8 WorldView2 bands and 9 Sentinel2 bands"</i>
11:30-11:45		Michał Chiliński (Univ. of Warsaw, Poland): <i>"Correlation between vegetation indices and ant populations – spectral measurements from UAV"</i>
11:45-12:00		Miriam Machwitz (Luxembourg Institute of Science and Technology, Luxembourg): <i>"UAV based estimation for total nitrogen uptake"</i>
12:00-12:15		Shawn C. Kefauver (Univ. of Barcelona, Spain): <i>"UAV Phenotyping and Proximal Sensing for Maize Assessments in Breeding Programs"</i>
12:15-12:30		Kadmiel Maseyk (The Open University, UK): <i>"Forest response to elevated CO₂ from UAV-based measurements of Solar Induced Fluorescence"</i>
12:30-13:30		
13:30-14:00	Session 4: Reflectance and fluorescence to better understand plant functioning and ecophysiological processes	Uwe Rascher (FZ Jülich, Germany): <i>"Title to be confirmed"</i> (keynote)
14:00-14:30		Kaiyu Guan (Univ. of Illinois, USA): <i>"Harnessing satellite big data for predicting food production"</i> (keynote)
14:30-14:50		Lars Eklundh (Lund University, Sweden): <i>"OPTIMISE data for understanding phenology and carbon cycling"</i>
14:50-15:20		Coffee break + poster session
15:20-15:40		Giulia Tagliabue (Univ. of Milano-Bicocca, Italy): <i>"Linking sun-induced fluorescence and photosynthesis in a forest ecosystem"</i>
15:40-16:00		Georg Wohlfahrt (Univ. of Innsbruck, Austria): <i>"Gross primary productivity during a heat wave – putting sun-induced fluorescence to the test"</i>
16:00-16:20		Petya Campbell (Univ. of Maryland Baltimore County, USA): <i>"Comparing the diurnal and seasonal dynamics in chlorophyll fluorescence and xanthophyll cycle, associated with photosynthetic function for two vastly different canopies"</i>
16:30-19:00		City tour + networking time
20:00-22:00		Networking dinner

Friday (23 February)

08:30-09:00	Registration		
09:00-09:30	Session 5: Vegetation modeling	Christiaan van der Tol (Univ. of Twente, The Netherlands): <i>"SCOPE for retrieving plant traits from reflectance and solar induced chlorophyll fluorescence" (keynote)</i>	
09:30-09:50		Jochem Verrelst (Univ. of Valencia, Spain): <i>"Progress in ARTMO: from physical modeling towards machine learning interpretation"</i>	
09:50-10:10		Mirco Migliavacca (MPI Jena, Germany): <i>"Inform terrestrial biosphere models with hyperspectral remote sensing and CO₂ fluxes"</i>	
10:10-10:25		Nastassia Rajh Vilfan (Univ. of Twente, The Netherlands): <i>"Retrieving photosynthesis from leaf chlorophyll fluorescence and green reflectance"</i>	
10:25-11:00		Coffee break + poster session	
11:00-11:15		Marco Celesti (Univ. of Milano-Bicocca, Italy): <i>"Analysis of short-term vegetation dynamics combining hyperspectral measurements and RTMs inversion"</i>	
11:15-11:30		Peiqi Yang (Univ. of Twente, The Netherlands): <i>"Linking canopy scattering of sun-induced chlorophyll fluorescence with reflectance"</i>	
11:30-11:45		Sheng Wang (Technical Univ. of Denmark, Denmark): <i>"Temporal interpolation of rapidly changing land surface variables estimated from an Unmanned Aerial System"</i>	
11:45-12:00		Closing of the conference	
12:00-13:30		Management Committee meeting	
13:30-14:30	Lunch		