

Second Announcement

France  
September, 7-13

# Carbon Workshop 2014

## Observatoire de Haute-Provence

This 1 week course is aimed primarily at **early career scientists** including advanced PhD students, postdocs, and Junior Faculty. The motivation is to use **in-situ data** to address emerging issues in **carbon cycle science** including atmospheric science, biogeochemistry and ecosystem science. This workshop will provide the opportunity to learn how to use 'big data' from the **ICOS and NEON** large networks of observatories while discussing the frontier of carbon science and identifying new research opportunities.

## ICOS-NEON GREENHOUSE GAS DATA TRAINING WORKSHOP

OHP, Haute-Provence, France

7-13 September 2014

extended deadline  
9 June 2014

### Program

Practical use cases and scientific hands-on approaches will be offered, focusing on emerging applications for data fusion across scales and regional boundaries. A field trip to visit an ICOS measurement site is planned.

#### Session 1. Overview

*GHG measurements in the Atmosphere and Ecosystem, Remote Sensing, Global integration*

#### Session 2. Atmosphere approaches

*Trend analysis, inverse modelling, data assimilation, Bayesian approaches*

#### Session 3. Ecosystem approaches

*Data mining, parameterization and validation of models, Bayesian Approach*

#### Session 4. New frontiers of carbon science

*Phosphorus cycle, using isotope measurements in flux estimations across scales, ...*

**Session 5. Project** *Working on an individual challenge in a small group during the workshop.*

### Venue

The Observatoire de Haute-Provence (OHP, <http://www.obs-hp.fr>) is an Observatory for atmospheric sciences and astronomy situated in Provence, southeast France, about 90 km east of Avignon, 100 km north of Marseille.

A shuttle will be organized to reach the very remote venue from Marseille (and return). The venue is not reachable by public transport.



Registration and detailed information <http://coopeus2014ss.sciencesconf.org>



Funded by the FP7  
programme of the  
European Union





## Target Audience

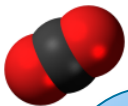
This training workshop aims at inspiring early career scientists including advanced PhD students, postdocs, and Junior Faculty interested in emerging issues and methods wishing to broaden and deepen their knowledge or to identify new research opportunities dedicated to GHG research and training early adopters of the joint harmonized datasets. This 1 week course will be offered to 20-24 participants, who are expected to know the basic of programming in at least one language.



**Registration Deadline** 9 June 2014 with motivation letter, CV and letter of support

**Costs** no fee, shared lodging & meals included **Language** English

**Organised by** ICOS: [www.icos-infrastructure.eu](http://www.icos-infrastructure.eu) and NEON: [www.neoninc.org](http://www.neoninc.org)



### Keynote Speakers

Philippe Ciais, LSCE, France  
Frédéric Baret, INRA, France  
Andy Fox, NEON, US  
Markus Reichstein, MPI-BGC, Germany  
Miguel Mahecha, MPI-BGC, Germany  
Marcel van Oijen, CEH, UK  
Philippe Peylin, LSCE, France  
Martina Schmidt, IUP, Germany  
Felix Vogel, LSCE, France; etc.

### Organizers

Dario Papale, ICOS, Italy  
Hank Loescher, NEON Inc., US  
Jean-Daniel Paris, ICOS, France  
Lindsay Powers, NEON Inc., US  
Nadine Schneider, LSCE, France  
Jeff Taylor, NEON, US  
Irène Xueref-Remy, ICOS, France

## About ICOS and NEON

ICOS and NEON research infrastructures are in-situ observation networks providing research data on greenhouse gas fluxes from ecosystems to the atmosphere. Together, ICOS and NEON aim to make these data available without technical, scientific or political barrier. These data typically include greenhouse gas (GHG) concentration, carbon and energy flux observations, and the surface micrometeorology surrounding these measurements. NEON is solely funded by the National Science Foundation (NSF).

This workshop is an initiative of the joint EU-US project **COOPEUS** [www.coopeus.eu](http://www.coopeus.eu)

**Registration and detailed information** <http://coopeus2014ss.sciencesconf.org>