# Fall Courses on Ecological Modelling

Six options (3 days for each course):

- Climate Modelling (Serge Planton)
- Structurally Dynamic Modelling (Sven Erik Jorgensen, Sabine Sauvage)
- Time Series Analysis (Christophe Baehr)
- Machine Learning in Ecological Modelling (Young-Seuk Park & Sovan Lek)
- Ecosystem Theory (Sven Erik Jorgensen)
- Uncertainty of Ecological Models
- Modelling and simulating agro-ecosystems (Gauthier Quesnel, Hélène Raynal)

All lectures will be done during the week before the conference (October 20-25, 2013) with the possibility to organize the visit of Pyrenees Mountains or circuit to visit medieval cities during the weekend (October 26-27, 2013). The cost of participation will be 120€ for each lecture course (incl. 3 days course and all teaching materials). The lecture course will be open for 10 candidates minimum.

## **Organizing Committee**

- Sovan Lek (Toulouse University, France)
- Christophe Baehr (Météo-France / CNRS, France)
- Laetitia Buisson (Toulouse University, France)
- Philippe Caille (Météo-France, France)
- Gaël Grenouillet (Toulouse University, France)
- Christophe Laplanche (INPT, Toulouse, France)
- Claude Monteil (INPT, Toulouse, France)
- Young-Seuk Park (Kyung Hee University, Korea)
- Régis Sabbadin (INRA, Toulouse, France)
- Sabine Sauvage (CNRS, France)

### **More Information**

contact : Sovan Lek - <u>sovannarath.lek@univ-tlse3.fr</u>

http://www.meteo.fr/cic/meetings/2013/ISEM

# International Scientific Advisory Committee

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 Sven E. Jørgensen (ISEM president; University of Copenhagen, Denmark)

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**International Society for Ecological Modelling** 



The 19th biennial ISEM conference

# Ecological Modelling for Ecosystem Sustainability in the context of Global Change











**First Circular** 

October 28 – 31, 2013 Toulouse, France

Hosted by Toulouse University and Météo-France

We live in a changed and changing world. Never before on Earth has the importance of sustainable development resonated with so many people. Without immediate and effective action, our planet will face unyielding pressure on the environment. The action needs to be guided by a scientific understanding of ecosystem function. Research, especially in Ecological Modelling, is crucial to support the sustainable development paradigm, in which economy, society and environment are integrated and positively reinforcing each other. The International Society for Ecological Modelling (ISEM) is an important and active research community contributing to this arena. Some progress towards gaining a better understanding of the processes of global change has been achieved, but much more is needed. This conference will provide a forum to present current research using models to investigate our actions to mitigate and adapt to change as well as how to preserve and protect ecosystems and their services.

### **Publications - Awards**

Both oral and poster sessions high quality accepted papers will be published in Special Issues of *Ecological Modelling*. The Best Conference Paper Award honors the author(s) of the highest quality papers. We also will have two awards: one for the best paper by young ecological modellers in Ecological Modelling in 2013 and one for 2014. The author of Best Paper Awards will be recognized in the conference.

### **Keynote Speakers**

- Sven E. Jørgensen
   University of Copenhagen, Denmark
   Associate Editor of Ecological Indicators
- Brian D. Fath
   Towson University, USA
   Editor-in-Chief of Ecological Modelling
- Pierre Legendre
   University of Montreal, Canada
- Philippe Ciais
   CEA, Sayclay, France
- Pierre Del Moral INRIA – Bordeaux, France
- Srinivasan Raghavan
   Texas A&M University and Texas AgriLife
   Research, USA
- Harald Sverdrup Lund Institute of Technology, Lund, Sweden

### **Location and Venue**

The conference will be held in the Centre International de Conférences of Météo France at Toulouse, in association with Toulouse University, CNRS and INRA (France).

### **Accommodations**

- Hotels will be proposed for all participants.
- Students' rooms will be available for students.

## Important Dates (Deadlines)

- Abstract Submission: May 20, 2013
- Abstract Acceptance Notice: June 20, 2013
- Workshop proposal: May 31, 2013Early Registration: June 30, 2013

### **Conference topics**

Modelling for Global Change
Modelling of Climate Changes: IPCC scenarios
The Regional Impacts of Climate Change
Sustainable Ecosystem Management
Ecological Engineering
Ecosystem Services
Ecology and Society: linking ecology, economy and sociology
Management of Natural Resources

Modelling for Biodiversity and Conservation Modelling for Invasive Species Modelling for Habitat Suitability

Modelling for Eco-hydrology

Modelling for Risk Assessment and Ecotoxicology
Modelling for Quantifying Gas Emissions
Modelling Biogeochemical Cycles
Ecosystem Networks
Modelling Contaminants Transportation
Monitoring and Assessment for Ecosystem Dynamics
Ecological Indicators
Linking Structure and Function of Ecosystems
Ecological modelling for use in environmental risk
assessment.

Modelling Aquatic Ecosystems
Modelling Terrestrial Ecosystems
Modelling Urban Ecosystems
Modelling Agricultural and Forest Ecosystems
Modelling Wetlands Ecosystems
Linking Terrestrial and Aquatic Ecosystems.

Model-Data Fusion
Development of Modeling Tools
Tools for End Users
Ecological Forecasting,
Sensitivity Analysis
Time Series Analysis
Remote Sensing
Upscaling-Downscaling