

# Last Announcement

## PMA06

### The Second International Symposium on Plant Growth Modeling, Simulation, Visualization and Applications

Beijing (CHINA PR)  
November 13-17, 2006

#### Last Call

**New abstract submission deadline, April 30<sup>th</sup> 2006**

**New Email address: [pma06@nlpr.ia.ac.cn](mailto:pma06@nlpr.ia.ac.cn)**

**<http://liama.ia.ac.cn/PMA06>**



Marc Jaeger @LIAMA

#### Objectives

PMA06 is the second International Symposium in the series “Plant Growth Modeling, Simulation, Visualization and Applications” that began with PMA03, Beijing, China, in 2003.

PMA06 is addressed to Plant Biologists, Mathematicians and Computer Scientists with an interest in Plant Growth Modeling, Simulation, Visualization and their Applications in Plant and Crops Sciences, Forestry, Agriculture, Environmental Sciences, Ecology and Virtual Reality. This international event provides an excellent opportunity to foster scientific and technical exchanges in a multi-disciplinary subject area, and will also allow the building of bridges between different scientific communities. Integration of fundamental knowledge on Plant Structure and Function in Mathematical Models and Computer Tools will be an important issue of this Symposium. Presentation of applications at different spatial and temporal scales is also highly encouraged.

PMA06 is organized by Chinese and French Institutions and is open to international scientists and students interested in Plant Growth Modeling, Simulation, Visualization and Applications. The event is supported by an International Scientific Committee. PMA06 will take place in Beijing, China, November 13-17, 2006. The symposium will include oral presentations, poster sessions, software demonstrations and tutorials.

## Conference Venue

Beijing is the center for culture, science, communication, and many other aspects of Chinese life. The capital of China is now a modern metropolitan city with a rich cultural heritage, from royal palaces and traditional monuments, of which the most famous are the Forbidden City and the Great Wall, to the popular Hutongs and Beijing Opera. Beijing is also a model of Chinese people's life and is the gateway to other parts of China.



Photo by Thierry Fourcaud @LIAMA

Agriculture-, Forestry- and Environmental- Sciences are very important issues in China. More than 30 universities in the Mainland of China are dedicated to *Agriculture* or *Forestry*, some of which are situated in the Beijing area. In this setting, development and application of Plant Growth Models and Visualization tools have become increasingly important. PMA06 also provides opportunities for the increasing number of Chinese researchers active in these fields, to enter the international community.

An excursion of famous places in Beijing will be organized. Further information will be given on the PMA06 web site <http://liama.ia.ac.cn/PMA06>.

## Conference is Open to the Following Topics

### 1- Analysis of Plant and Ecosystem Architecture

**Keywords:** *Methodologies and techniques for plant sampling; Description and analysis of root and aerial architecture; Description and analysis of ecosystem components; Encoding of plant topology; Fractal analysis; Specific spatial statistics*

### 2- Mathematical Modeling and Simulation of Plant Growth

**Keywords:** *New mathematical and modeling methods, Analytical, stochastic; empirical; fractal models; Automation models; L-systems; Process based models; Structural functional models; Modeling plant-environment interactions; Modeling adaptation of plants/trees to abiotic constraints (multi-physical models, biomechanical models); Simulation techniques and software*

### 3- Modeling and Simulation of Plant Community, Landscape and Ecosystems

**Keywords:** *Scaling issues; Increasing simulation efficiency (code optimization techniques, parallelization, model simplification); Modeling of plant growth competition; Crop and forest models; Application to forest and crop production and quality; Application to ecology, eco-engineering and land use; Digital agriculture; Digital forestry*

### 4- Calibration, Optimization, Optimal control and Limit State Analysis

**Keywords:** *Model calibration techniques; Theoretical analysis of model behavior; Optimal control for plant/tree growth and production (resource uptake, production, allocation, etc.); Sensitivity analysis; Uncertainty quantification; Analysis and model comparison*

### 5- Theory and Techniques for Plant and Landscape Visualization

**Keywords:** *Visualization of plant structures and plant functions; Visualization of trees at single, stand, and landscape scales; Realistic and interactive representation of plants and their environment; Application of plant visualization to agricultural and forestry management; Integration with GIS, RS, GPS; Virtual reality; Video games*

## Organizing Committee

PMA06 is organized by LIAMA, Sino-French Joint Laboratory in Computer Science, Control and Applied Mathematics (<http://liama.ia.ac.cn/>), with cooperation of China Agriculture University (CAU, <http://www.cau.edu.cn/>).

The conference will be chaired by

Dr Thierry FOURCAUD  
LIAMA/CIRAD-AMAP

Dr Xiao-Peng ZHANG  
LIAMA/CASIA-NLPR

Members of the organizing committee are

Dr. Mengzhen Kang (LIAMA)  
Dr. Alexia Stokes (LIAMA)  
Dr. Zhigang Zhan (CAU)

Ms. Qing-Qiong Deng (LIAMA)  
Ms. Bi-Zhen Hong (LIAMA)

## International Scientific Committee

Dr Daniel Barthelemy (France)  
Dr Gerhard Buck-Sorlin (Germany)  
Prof Weixing Cao (China)  
Prof Baoquan Chen (USA)  
Dr Norishige Chiba (Japan)  
Dr Paul-Henry Cournede (France)  
Dr Philippe de Reffye (France)  
Dr Maurice Goursat (France)  
Prof Yan Guo (China)  
Dr Ep Heuvelink (Netherlands)  
Prof David Hill (France)  
Prof Tsuyoshi Honjo (Japan)  
Prof Baogang Hu (China)  
Dr Marc Jaeger (France)  
Prof Hans Lambers (Australia)  
Prof Baoguo Li (China)

Prof Yuanchang Lu (China)  
Prof Nelson Max (USA)  
Dr Fabrice Neyret (France)  
Dr Loic Pages (France)  
Prof Hans Pretzsch (Germany)  
Prof Bill Shipley (Canada)  
Prof Daniel Thalmann (Switzerland)  
Dr David Thornby (Australia)  
Prof Herman van Keulen (Netherlands)  
Dr Marcel van Oijen (UK)  
Dr Jan Vos (Netherlands)  
Dr David A. Weinstein (USA)  
Prof Enhua Wu (Macao, China)  
Prof Baogui Zhang (China)  
Prof Chunjiang Zhao (China)

## Papers/Posters/Software Demonstrations submission

The title and abstract of papers/posters/software demonstrations must be sent before April 15th 2005 by email, fax or post-mail (see Contacts section), using the attached submission form also available on the PMA06 web site. Further information about papers and posters formats will be given on the PMA06 web site.

## Working language

The working language is English.

## Proceedings

A selection of research papers in plant biology will be published in the **Annals of Botany** (<http://aob.oxfordjournals.org/>).

A selection of research papers in computer sciences and applied mathematics will be published in the **Journal of Computer Science & Technology** (<http://jcst.ict.ac.cn/>).

Proceedings of the conference will be also published as a book, edited by **Tsinghua University Press** with an ISBN number, including a copy of the above papers published in the international journals.

## Calendar

### Abstract submission

Acceptance of oral presentations and posters by the Scientific Committee	<b>April 30, 2006</b> June 15, 2006
Publication of the final program on the web site	June 30, 2006
Early registration deadline	September 15, 2006
Manuscript submission deadline for Proceedings	December 31, 2006
Acceptance of papers and comments from reviewers	March 15, 2007
Revised manuscripts	April 15, 2007
Final acceptance of papers	June 30, 2007
Final manuscripts	July 31, 2007
Publication of Proceedings	end 2007

### Registration fees

Delegates*	400 Euros
Late registration	440 Euros
Student	200 Euros
Late registration	220 Euros

Fees include reception, coffee breaks, lunches and a copy of the Conference Proceedings.

\* This price is negotiable for researchers from developing countries. Contact us by email at [pma06@liama.ia.ac.cn](mailto:pma06@liama.ia.ac.cn)

### Financial support

NSFC (the National Natural Science Foundation of China) has provided a special fund to support the organization of PMA06 through a special project to underline the importance of this symposium.

LIAMA (the Sino-French Joint Laboratory in Informatics, Automation and Applied Mathematics) will support the organization of PMA06 through a special budget.

PMA06 will be also supported by INRIA, INRA, CIRAD, and the French Embassy in China.

### Contacts



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or

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