

Workshop DigiPlante 2012

(4th Edition)

Vallée de Loire - Orléans, 28-29 June 2012

Program.

----- 28 June -----

10:00 Introduction and Welcome Coffee

Session 1: Modeling

Chair: P.H. Cournède

10:15 Véronique Letort

Towards a source-sink growth model for a model tree : Cecropia sciadophylla. (Cecropia, the "sugar beet" for trees ...)

10:45 Qi Rui

Base temperature selection for the prediction of leaf appearance dynamics of winter oilseed rape (Brassica napus)

11:15 Blandine Romain

Modelling Abdominal Perfusion in Dynamic Computed Tomography Images.

11:45 Marion Carrier

Revisiting the mass budget in STICS

12:05 Robert Beyer

A Porous Medium Equation to model plant growth at field level: simulation of a heterogeneous field

12:30 Lunch

Session 2: Model Identification and Evaluation

Chair: V. Letort

14:00 Charlotte Baey

Evaluation of the Predictive Capacity of Five Plant Growth Models for Sugar Beet

14:30 Kang Fenni

Testing the predictive capacity of Cornflo model on US database.

15:00 Samis Trevezas

Parameter Estimation of a Plant Growth Model vis Stochastic Variants of the EM Algorithm

15:30 Chen Yuting

Particle filtering methods for plant growth models and the issue of parameter estimation uncertainty

16:00 Chi Thanh Nguyen
Uncertainty Analysis and Unscented Kalman Filtering in PyGMALion

16:30 Coffee Break

Session 3: Methods and Tools

Chair: S. Trevezas

16:45 Qiongli Wu
A comprehensive methodology of global sensitivity analysis for complex biophysical models

17: 15 Langshi Chen
Efficiency of Random Generators for the Computation of Sobol's indices.

17:35 Paul-Henry Cournède
Optimal Control of Carbon Allocation for Plant Growth.

18:05 Benoit Bayol
PyGMALion: From a Library to an Embedded Domain-Specific Language

18:35 *Conclusion*