

***Biomathematics Seminar 2016
(8th Edition)***

Etretat, 6-7 July 2016

----- *Program - 6 July* -----

Session 1: Modelling and Model Analysis

Chair: P.-H Cournède

10:00 Pierre Carmier

Wheat growth modeling with coupled soil and stress modules

10:25 Etienne Claverie

Modelling soil temperature to predict emergence of maize

10:50 Véronique Letort

The Pipe Model Theory, look-back on 50 years of uses and misuses

11:15 Gautier Viaud

Genotypic differentiation of Arabidopsis Thaliana: a Greenlab model based on data obtained through image processing

11:40 Julien Sainte-Marie

Sensitivity analysis with dependent variables applied to Sunflo. Generalization of Sobol indices and copulas

12:05 Lunch

Session 2: Statistical Learning and Inference

Chair: P. Carmier

14:00 Sarah Lemler

Statistical inference for multivariate stochastic processes with application to neurosciences

14:35 Chloé Adam

Pattern recognition in medical apps usage sequences

15:00 Thomas Galinier

Using crop model to support growing conditions typology

15:25 Xiangtuo Chen

A comparison between data-based and model-based approaches for crop yield prediction

15:50 Coffee Break

Session 3: Parameter Estimation in Mechanistic Models

Chair: V. Letort

16:05 Samis Trevezas
Nonparametric Methods for Crop Yield Prediction

16:40 Antonin Della Noce
Application of Mixed-effect models to single-stemmed plant development

17:05 Paul-Henry Cournède
Testing variance components in nonlinear mixed effects models. Application to plant growth modelling

17:30 Konstantinos Kuttrumpas
Sequential Monte-Carlo and Approximate Bayesian computation for population parameter estimation using single cell data

17:55 Conclusion